


When students work alongside our exceptional faculty, researchers and scholars, and have the opportunity to observe and practice purposeful innovation, we begin to achieve our collective vision to impact the world through our graduates.

SDSU, situated on Kumeyaay land and near the U.S.-Mexico border, is an academically rich, research-focused urban university. SDSU is known for its academic strength and affordability, and for its remarkable students, exceptional and dedicated faculty and staff, and innovative programs. We are a community committed to the ideals of diversity and equity and dedicated to human growth and development. We are committed to student success, transformative research, creative activities, and community engagement.

Together, we are making an impact on the future of San Diego, the binational community in which our campus sits, and other communities around the world.


Adela de la Torre, President of the University





## STUDENT

 SDSU students study hard, but theyalso know how to have fun outside of the classroom. You can join an intramu
ral sports team or an honor society, join one of more than 300 recognized stu
dent clubs and organizations on campus, dent clubs and organizations on campus,
lead a community service project or live
on our lively campus or fraternity row. SDSU's Conrad Prebys Aztec Student Union - given LEED Double Platinum
status as one of the most energy-effistatus as one of the most energy-effi-
cient facilities in the world - is a hub
for student activities with its Co for student activities with its Commuter Resource Center, restaurants, bowling
alley and game room, meeting spaces and theatre. athletics teams, which are setting new standards for success. A record number of Aztec teams are qualifying for post-season competition, and both our men's and women's basketball teams
have advanced to the Sweet 16 in the have advanced to the Sweet 16 in the has play
games.
3


## SDSU's legacy of <br> leadership is found in research and innovation, entrepreneurship, community engagement, and global competition.

Our alumni base is more than 400,000 strong, meaning you will find fellow Aztecs all over the world. SDSU also maintains the Aztec Mentor Program, which pairs current students with supportive and experienced professionals who serve as their mentors. Since its inception in 2013, the program has matched 10,066 students with mentors. SDSU alumni lead governments, businesses and organizations throughout the world. They are legislators, CEOs, company presidents and founders, renowned artists and filmmakers, school administrators, and engineers. Aztecs run biotech companies, accounting firms, restaurant chains, and hospitals and have also been to space, just to name a few contributions and industries.


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## NONDISCRIMINATION POLICY

San Diego State University maintains and promotes a policy of nondiscrimination and nonharassment on the basis of race, religion, color, sex, age, disability, marital status, sexual orientation, gender identity and expression, national origin, pregnancy, medical condition, genetic information, and covered veteran status.

The policy stands as a statement of this university's moral commitment to the right of all persons to equal opportunity in a nondiscriminating, harassment-free atmosphere. The Office of Employee Relations and Compliance oversees that commitment to equal opportunity. San Diego State University places high priority on that objective and expects all members of the university to support this policy. Refer to San Diego State University Senate Policy File, as well as California State University Executive Orders 1095, 1096, and 1097.

## Academic and Annual Calendars

2020

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## 2021

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## SUMMER TERM 2020

May 25: Holiday - Memorial Day.Faculty/staff holiday. Campus closed.
May 26: First day of summer term.
May 26-July 13: Session S1 term.
May 26-Aug. 19: Session T1 term.
May 26: First day of S 1 and T 1 classes.
June 3: Last day to add/drop S1 classes.
June 5: Last day to add/drop T1 classes.
July 1: Applications for bachelor's degree for May and Aug. 2021 graduation accepted.
July 1: Applications for advanced degree for May and Aug. 2021 graduation accepted.
July 3: Holiday - Independence Day observed. Faculty/staff holiday. Campus closed.
July 6: Last day of S1 classes.
July 7-Aug. 19: Session S2 term.
July 7: First day of S2 classes.
July 15: Last day to add/drop S2 classes.
July 17: Census.
Aug. 14: Last day of T1 and S2 classes. (Final examinations are the last day of classes for each summer session.)
Aug. 19: Grades due from instructors. (11 p.m. deadline.)
Aug. 19: Last day of summer term.

## FALL SEMESTER 2020

Aug. 20: First day of fall semester.
Aug. 20: All-University Convocation.
Aug. 21: Last day to officially withdraw for fall semester 2020 and receive a full refund.
Aug. 22: New Student and Family Convocation.
Aug. 24: First day of classes.
Sept. 2: Last day for faculty to drop students from classes.
Sept. 4: Last day to add/drop classes or change grading basis.
Sept. 4: Last day for payment of tuition and fees.
Sept. 4: Last day to officially withdraw from the university without penalty fee for fall semester 2020.
Sept. 4: Last day to file application for bachelor's degree for Dec. 2020 graduation.
Sept. 4: Last day to file application for advanced degree for Dec. 2020 graduation.
Sept. 4: Last day to file petition for concurrent master's degree credit for fall semester 2020.
Sept. 7: Holiday - Labor Day. Faculty/staff holiday. Campus closed.
Sept. 21: Census.
Oct. 1: Applications for admission or readmission to San Diego State University for the fall semester 2021 accepted. Undergraduate applications are NOT accepted after 11:59 p.m. on Nov. 30. Graduate applicants should consult the Graduate Admissions website for closing dates.
Nov. 2: Last day to officially withdraw from all classes for fall 2020 and receive a prorated refund (withdrawal after Sept. 4 requires special approval and penalty fee is assessed).
Nov. 11: Holiday - Veteran's Day. Faculty/staff holiday. Campus closed.
Nov. 25: No classes. Campus open.
Nov. 26-27: Holiday - Thanksgiving break. Faculty/staff holiday. Campus closed.
Dec. 10: Last day of classes.
Dec. 11-17: Final examinations.
Dec. 23-28: Holiday - Winter break. Faculty/staff holiday. Campus closed.
Dec. 31: Grades due from instructors. (11 p.m. deadline.)
Dec. 31: Last day of fall semester.

## SPRING SEMESTER 2021

Jan. 1: Holiday - New Year's Day. Faculty/staff holiday. Campus closed.
Jan. 18: Holiday - Martin Luther King, Jr. Day. Faculty/staff holiday. Campus closed.
Jan. 19: First day of spring semester.
Jan. 19: Last day to officially withdraw for spring semester 2021 and receive a full refund.
Jan. 20: First day of classes.
Jan. 29: Last day for faculty to drop students from classes.
Feb. 2: Last day to add/drop classes or change grading basis.
Feb. 2: Last day for payment of tuition and fees.
Feb. 2: Last day to officially withdraw from the university without penalty fee for spring semester 2021.
Feb. 2: Last day to file application for bachelor's degree for May and Aug. 2021 graduation.
Feb. 2: Last day to file application for advanced degree for May and Aug. 2021 graduation.
Feb. 2: Last day to file petition for concurrent master's degree credit for spring semester 2021.
Feb. 5: Applications for bachelor's degree for Dec. 2021 graduation accepted.
Feb. 5: Applications for advanced degree for Dec. 2021 graduation accepted.
Feb. 16: Census.
March 23: Last day to officially withdraw from all classes for spring 2021 and receive a prorated refund (withdrawal after Feb. 2 requires special approval and penalty fee is assessed).

## March 29-April 2: Spring break.

March 31: Holiday - Cesar Chavez Day. Faculty/staff holiday. Campus closed.
May 6: Last day of classes.
May 7-13: Final examinations.
May 13: Commencement, SDSUImperial Valley.
May 14-16: Commencement, San Diego campus.
May 21: Grades due from instructors. (11 p.m. deadline.)
May 21: Last day of spring semester.
May 22-28: Commencement.

## SUMMER TERM 2021

NOTE: Refer to SDSU Summer Session Class Schedule for specific term dates.
May 24: Holiday - Memorial Day. Faculty/staff holiday. Campus closed.
May 25: First day of summer term and first day of summer classes.
July 1: Applications for bachelor's degrees for May and Aug. 2022 graduation accepted.
July 1: Applications for advanced degree for May and Aug. 2022 graduation accepted.
July 5: Holiday - Independence Day observed. Faculty/staff holiday. Campus closed.
Aug. 13: Last day of summer classes. (Final examinations are the last day of classes for each summer session.)
Aug. 19: Grades due from instructors. (11 p.m. deadline.)
Aug. 19: Last day of summer term.

Please note: This is not an employee work calendar and is subject to change. Refer to the SDSU website for changes to this calendar.

in this section:
»Administration and Organization

## Administration and Organization

## Principal Officers of Administration

President of the University Adela de la Torre
Provost and Senior Vice President for Academic Affairs.
.Salvador Hector Ochoa
Vice President for Business and Financial Affairs
and Chief Financial Officer ..................Agnes Wong Nickerson (Interim)
Vice President for Research and Graduate Dean .......Stephen C. Welter
Vice President for Student Affairs....................Christy Samarkos (Interim) Vice President for University Relations and Development.

Adrienne D. Vargas

## Administration

Office of the President
Chief of Staff.
.Brittany Santos-Derieg
Chief Communications Officer and
Associate Vice President for Strategic Communications and Public Affairs.

La Monica Everett-Haynes
Chief Diversity Officer and Associate Vice President
for Diversity and Innovation...
.J. Luke Wood
Associate Chief Diversity Officer
for External Affairs......................................................Mohamed M. Ahmed
Associate Chief Diversity Officer for Faculty and Staff Success.

Jennifer Y. Imazeki
Associate Chief Diversity Officer
for Student Engagement .................................................... Jessica L. Nare
Assistant Chief Diversity Officer and Director of Identity Centers ........................................ Augie Garibay
Chief Information Officer
for Information Technology ........................................................
Chief Academic Technology Officer and Associate Vice President for Instructional Technology ..

James P. Frazee
Chief Information Security Officer .........................................................ipaldi (Interim) Associate Vice President for Enrollment Services Information Technology ................ Tony C. Chung Assistant Vice President for Academic Research Information Technology...

Edgar R. Hodge

## Office of the Provost

Associate Vice President for
Academic Affairs, Enrollment Management......................Stefan Hyman Senior Director of Enrollment Management...Sandra Temores-Valdez Director of Admissions... Sabrina Cortell Director of Advising and Evaluations .........................Christine V. Molina Director of Communications ......................................................Polly Sipper Director of Curriculum Services ...........................................Stephanie Guerra Director of Military and Veterans Program...........................Todd Kennedy Registrar.
..Stephanie Anderson
Associate Vice President for Academic Affairs,
Faculty Advancement................................................................. Mrookna M.
Associate Vice President for Academic Affairs,
Resource Management..........................................
Associate Vice President for Academic Affairs,
Associate Vice President for Academic Affairs,
Radmila Prislin Student Achievement..
..Norah P. Shultz
Associate Vice President for Academic Affairs,
SDSU International Affairs ..............................Cristina M. Alfaro (Interim)
Assistant Vice President for Academic Affairs,
Analytic Studies and Institutional Research ...
...Jeanne L. Stronach
Director of Academic Labor Relations
for Academic Affairs. $\qquad$ Alexander W. Chizhik
Chair of the Senate.
. Mark R. Wheeler

\section*{Office of the Senior Vice President for SDSU Mission Valley Development <br> 


Assistant Vice President for Special Projects.......................... Dames S. Herrick Montoya
Assistant Vice President for Alumni Engagement.............
President of SDSU Alumni Association
Board of Directors.................................................................................................................................................................

## Colleges, Schools, Departments, and Programs

COLLEGE OF ARTS AND LETTERS

Program
International Business John C. Putman
COLLEGE OF EDUCATION

Doctoral Programs
EDL - Postsecondary Ed Wendy S. Bracken
EDL - PK-12.......................................................................James M. MarshallSDSU/CGU........................................................................ Marva G. Cappello
Mathematics and Science Education ..............................Joanne E. LobatoDirector of Office for Student Success .................................Lisa F. McCully
Manager of Budget and Analysis... Julie A. White
Operations and Support Services Analyst.. Elsa Tapia
Departments and Schools Chair or Director
Administration, Rehabilitation and
Postsecondary Education. Caren L. Sax
Child and Family Development.. Sarah M. Garrity
Counseling and School Psychology Brent A. Taylor
Dual Language and EnglishLearner Education........................................... Margarita Machado-CasasEducational Leadership......................................................Douglas B. FisherSpecial Education .........................................................................Laura J. Hall
Teacher Education. Lynne A. Bercaw
Programs
Liberal Studies Virginia Loh-Hagan
Mathematics and Science Education. Joanne E. Lobato
COLLEGE OF ENGINEERING
Dean. Eugene A. Olevsky
Associate Dean for Graduate Studiesand Research..................................Temesgen Garoma Ararsso (Interim)Associate Dean for Undergraduate Studies..........Yusef Ozturk (Interim)Assistant Dean for Student Affairs....................................Theresa M. GarciaDirector of Veterans Internship...................................................... Brittany Field
Departments Chair
Aerospace Engineering. Ping Lu
Civil, Construction, and EnvironmentalEngineering.Janusz C. Supernak
Electrical and Computer Engineering... Chunting C. MiMechanical Engineering..........................................................John Abraham
COLLEGE OF HEALTH AND HUMAN SERVICES Associ Mark B. Reed
Associate Dean for Academic Affairs............................. Sonja L. Pruitt-Lord
Assistant Dean for Student Affairs................................................
Director of Development. Natasha Bliss
Schools Director
Nursing. Philip A. Greiner
Public Health Hala N. Madanat
Speech, Language, and Hearing Sciences ........................................................................ Love-Geffen
Programs
Tracy E. Love-Geffen
Gerontology Jong Won Min
COLLEGE OF PROFESSIONAL STUDIES AND FINE ARTS
Dean. Peggy Shannon
Associate Dean. .................... Donna M. ConatyAssociate Dean.Kurt J. Lindemann (Acting)
Assistant Dean for Student Affairs.................................Alane S. Lockwood
Director of Communications ........................Lizbeth Persons Price (Interim)Director of Development..Elise Moersch
Director of International Programs. ..... Gi

| Departments and Schools | Chair or Director |
| :---: | :---: |
| Aerospace Studies ................................................... G. John Grim |  |
| Art and Desig | Ann M. Buckley |
| Communication..................................................... | Canary |
| L. Robert Payne Hospitality and Tourism Management......Carl Winston |  |
| Journalism and Media Studies.................Ronald J. Arceneaux (Interim) |  |
| M | Maj. Michelle Parlette |
| Music and Dance......................................................... Scott Lipscomb |  |
| Naval Science.....................................................Capt. Edwin D. Kaiser |  |
| Public Affairs ........................................................................... Sherry Ryan |  |
| Theatre, Television, and Film........................................ Adeniyi Coker |  |
| Programs |  |
| Criminal Justice..................................................................................................... Lathe VaradarajanInternational Security and Conflict Resolution ......... |  |
|  |  |
| Learning Design and Technology............ |  |
|  |  |
| COLLEGE OF SCIENCES |  |
|  |  |
| Associate Dean for Academic <br> and Faculty Affairs <br> Catherine J. Atkins |  |
| Associate Dean for Graduate and Research Affairs...........Tod W. Reeder Assistant Dean for Student Affairs. Estralita M.E. Martin |  |
|  |  |
| Executive Director of Development............................... Stacy Carota |  |
| Director of College of Sciences Advising...........................Emilio C. UlloaDirector of Resource Management.............................ny P. Carrasco |  |
|  |  |
| epa |  |
| Astronomy .......................................................................Eric L. Sandquist |  |
|  | Robert W. Zeller |
| Chemistry and Biochemistry .....................................William G. Tong |  |
|  |  |
| Geological Sciences | Allen M. Gontz |
| Mathematics and Statistics................................... Michael E. O'Sullivan |  |
| Physics .......................................................................... Usha S. Sinha |  |
|  |  |
| Programs |  |
| Bioinformatics and Medical Informatics .....................Robert A. Edwards |  |
| Biomedical Quality Systems .........................................Lisa C. Dowdy |  |
| Computational Science ...................................................... José E. Castillo |  |
| Environmental Sciences <br> John. J. Love <br> Homeland Security $\qquad$ Eric G. Frost and Lance W. Larson |  |
|  |  |
| International Security and Conflict Resolution ........... Latha Varadarajan |  |
| Mathematics and Science Education.............................Joanne E. Lobato |  |
| Regulatory Science ....................... Catherine J. Atkins and Lisa C. Dowdy |  |
|  |  |
| LIBRARY AND INFORMATION ACCESS |  |
| Dean.................................................................................. Scott Walter |  |
| Associate Dean.................................................. Melissa Lamont (Interim) |  |
| Director of Access Services................................ Linda Muroi (Interim) |  |
| Director of Budget and Fiscal Operations................... Sallee Spearman |  |
| Director of Information Technologies and Digital Initiatives $\qquad$ |  |
| SDSU IMPERIAL VALLEY |  |
|  |  |
| Associate Dean for Academic Affairs.............................. Mark R. Wheeler |  |
|  |  |
|  |  |
| Director of Library Services ............................................................. |  |
| ctor of Advancement.........................................Victor Nava |  |

## GRADUATE AND RESEARCH AFFAIRS

## Vice President for Research

 and Graduate Dean .............. Associate Vice President for Research and Innovation.. $\qquad$ Stephen C. Welter Stanley R. Maloy Associate Vice President for Research Advancement...... John Crockett Associate Dean for Graduate and Research Affairs...........................................................Edmund M. Balsdon Assistant Dean for Student Services, Policy and Curriculum Andrew J. BohonakDirector of Information Technology Matt Brown Director of Research Affairs. Rick Gulizia
ACADEMIC ENGAGEMENT AND STUDENT ACHIEVEMENT
Associate Vice President for Academic Affairs,Student Achievement.Norah P. Shultz
Assistant Vice President for
Educational Effectiveness. Stephen A. Schellenberg
Assistant Dean for Academic Engagementand Student Achievement.Michelle Lopez
Assistant Dean for Special Projects. Tanis K. Starck
Programs
Academic Internships, Faculty-StudentMentor, General Studies................................................................... Pé R. Preciado
Brightside Produce San Diego ..........................................................ana Castro
Center for Regional Sustainability.. Jessica A. Barlow
Center for Supplemental Instruction ..... Emily A. Bates
Compact Scholars, BE HIP Student Initiatives.................. Janet M. Abbott
Early Assessment. Rosie Villafana-Hatcher
First Generation Student Successand Transfer Student Outreach Alliance...........................Michelle LopezInterdisciplinary Studies in Three Departments,Transition Advising Center, Undeclared Students ......... Paul W. Justice
International Engagement. Chris Kjonaas
The Sage Project.. Jessica A. Barlow
Service Learning Vinod Sasidharan
Weber Honors College.. Stacey L. Sinclair
SDSU GLOBAL CAMPUS
Associate Dean for Finance and Operations...........................Joe Wolfman
Associate Dean for Professional
and International Programs.. Shara Tscheulin
Executive Director of International Strategy and Programs
Executive Director of Marketing. Joe Brock Executive Director of New
Senior Director of Professional Program Operations ........ Kevin I. Carter Registrar and Director of Student Enrollment. Kristine Catano
Auxiliary Organizations
The Campanile Foundation
Chair..Jerry Sanders
President and Chief Executive Officer Adrienne D. Vargas
Chief Financial Officer .......................................................David H. FuhrimanSecretary.Adrienne D. Vargas
San Diego State University ResearchFoundation President.................................Adela de la Torre
Vice President for Research and Deanof Graduate Affairs.Stephen C. Welter
Associate Vice President/Executive Director ..... Michèle G. Goetz
Aztec Shops, Ltd.
Chief Executive Officer/Associate Vice President,Business and Financial Affairs....Todd Summer
The Associated Students of San Diego State UniversityPresident.Christian J. HoltExecutive DirectorChristina Brown
KPBS
General Manager Thomas Karlo

## in this section:

» Academic Advising
»Admission and Registration
» Tuition and Fees
»Financial Aid and Scholarships
》Division of Student Affairs
» Division of Diversity and Innovation
» Special Programs and Services

## Academic Advising

## Importance of Academic Advising

Completing the requirements for your degree in a timely manner requires planning. Academic advisers can help you develop your academic plan. Don't wait until you have a problem to see an adviser. Let the adviser help you prevent any problems. The sooner you make the decision about what your major will be, the better you can plan your academic program. There are many program choices available at SDSU. An adviser can assist you with this decision process. Choosing the major that is right for you and compatible with your life goals will enhance your academic success. Requirements, policies, and procedures may change from year to year. Advisers can clarify which changes may affect you and which will not.

## Advising Services

- Understand advising tools and graduation requirements
- Develop an academic plan
- Evaluate transfer credit
- Choose or change a major
- Clear mathematics and writing requirements
- Remove probationary status to avoid disqualification
- File for graduation
- Prepare to enter a professional school (medical, dental, legal, etc.)


## - Plan your next semester's schedule

## Major Academic Plans (MAPs)

The MAPs website located at http://www.sdsu.edu/mymap was created to help students navigate the course requirements for their majors and complete degree requirements in a timely manner. Students may also access their Personal MAP at http:// www.sdsu.edu/portal. The Major Academic Plans (MAPs) created for each major are not meant to encompass every major-specific requirement or a required sequencing of courses. Refer to this catalog for a complete description of requirements, including: course prerequisites, minimum grade requirements, unit limitations, and General Education approved courses and distribution requirements.

The MAPs will help you identify which General Education course will also fulfill a major preparation course requirement. They will also suggest sequencing to ensure you complete prerequisites prior to taking the higher-level course.

Questions about graduation requirements and General Education should be directed to the Academic Advising Center at 619-594-6668. The Academic Advising Center is located in Student Services West, Room 1551 (north of Conrad Prebys Aztec Student Union) and online at http://www.sdsu.edu/advising.

## Student Responsibilities

## Regarding Advising

General Catalog. Know your catalog year (or years) for your General Education requirements and for your major requirements and be sure to access the online SDSU General Catalog. Provided you maintain your enrollment at SDSU, this catalog or these catalogs establish the requirements you must complete for graduation. Details regarding catalog rights are listed under Graduation Requirements.

Use your degree evaluation. Your online degree evaluation, available at http://www.sdsu.edu/portal, is a personalized document that provides a status report on your progress toward completing your graduation requirements. The degree evaluation outlines how your courses fulfill your General Education, major preparation, major, and other graduation requirements and shows which classes you can select to fulfill these requirements. Once you reach 90 units and apply for graduation, you will be sent an official graduation evaluation describing your remaining degree requirements. You can review your unofficial degree evaluation in
the WebPortal to ensure that you are on track to graduate within your desired time frame. Don't risk a delay in graduation due to a missing graduation requirement.

See your adviser regularly. Don't wait until you encounter a problem before seeing an adviser. Check your degree progress regularly.

Keep an advising file. Keep a personal copy of transcripts (official or unofficial) from each college or university you have attended in a file and bring it to your advising session. SDSU does not release copies of other schools' records. Evaluations, test scores, and other important academic information should also be kept in your personal advising file.

Plan your advising sessions during non-peak times. Advisers and advising centers are busiest during registration periods and the first weeks of classes. Avoid these busy advising times with a little planning. Faculty advisers (major advisers) are not always available during the summer months or between semesters.

File for graduation. Graduation is not automatic; you must apply to graduate during the stated graduation application periods. Filing early will assure a final graduation evaluation before your last semester of enrollment. It is recommended you file for graduation once you have passed 90 units. Visit http://www.sdsu. edu/applytograduate.

## Seeing an Adviser

There are many types of advisers at SDSU. For general undergraduate advising regarding graduation requirements, General Education, competency requirements, probation and disqualification, and major selection, go to the Academic Advising Center, Student Services West, Room 1551, 619-594-6668.

Major/faculty advisers for each major are available to help you plan your upper division course schedule, and provide you with advice about career options and graduate school. For advising in your undergraduate or graduate major, contact the adviser or advising center assigned to your major and class level. A more detailed listing follows. A directory of SDSU academic advisers is available at http://www.sdsu.edu/majoradvisers.

Students in the Educational Opportunity Program needing advising should go to the Office of Educational Opportunity Programs/Ethnic Affairs, Student Services East, Room 2109, 619-594-6298.

For general requirements for master's or doctoral degrees (except for the major), contact the Division of Graduate Affairs, Student Services East, Room 1410, 619-594-5213.

For teaching credential advising, contact the College of Education, Office of Student Services (EBA-259). Teachers holding preliminary California credentials issued on the basis of programs completed at other universities or in other states, may secure program advising from the Office of Student Services, Education and Business Administration, Room 259, 619-594-6320.

For specialized advising such as preprofessional advising (premedical, prelaw, etc.), contact the adviser assigned to your preprofessional area. A detailed listing follows and can also be found at http://www.sdsu.edu/preprof.

New Student Orientation is conducted by the Office of New Student and Parent Programs, 619-594-1509, for new students (freshmen and transfers) and provides important pre-registration advising. Visit http://www.sdsu.edu/orientation.

## Advising Centers

## Academic Advising Center

Student Services West, Room 1551, 619-594-6668, FAX 619-594-4902, Monday through Thursday, 9 a.m. -4 p.m.

The Academic Advising Center works with the university community to encourage and promote student learning in a welcoming and supportive environment. We clarify university policies, procedures, and requirements to ensure student retention and timely graduation. The center staff facilitates academic responsibility and competence by educating students to use resources effectively.

Advisers in the Academic Advising Center are available to help you understand SDSU graduation requirements, including General Education requirements and institutional policies and procedures. If you are undecided about a major, an adviser can help you develop an educational plan consistent with your life goals and objectives. Advisers can also connect you with important campus resources and services.

- Graduation Requirements
- General Education
- Undeclared Students
- University Academic Policies and Regulations
- Unofficial Evaluations
- Probation/Disqualification Advising


## Educational Opportunity/Ethnic Affairs

Student Services East, Room 2109, 619-594-6298
Monday through Friday, 8 a.m. - 4 p.m.

## PREPROFESSIONAL ADVISING

It is recommended that students contact their preprofessional adviser in their first semester at SDSU. Advisement for students planning to attend professional schools is available for the following programs:
Preaudiology
Speech, Language, and Hearing, Room 244..................619-594-2714 Predental
Geology/Mathematics/Computer Science,
Room 323 ............................................................................619-594-3030
Prelaw*
Adams Humanities, Room 4142.......................................619-594-5050
Premedical
Geology/Mathematics/Computer Science,
Room 323
619-594-3030
Preoccupational Therapy
Exercise and Nutritional Sciences, Room 331................ 619-594-5161
Preoptometry
Geology/Mathematics/Computer Science, Room 323.

619-594-3030
Prepharmacy
Geology/Mathematics/Computer Science,
Room 323.
619-594-3030
Prephysical Therapy
Exercise and Nutritional Sciences, Room 359...............619-594-5161
Prephysician Assistant
Geology/Mathematics/Computer Science, Room 323 ..

619-594-3030
Prepodiatric Medicine
Geology/Mathematics/Computer Science,
Room 323.
619-594-3030
Presocial Work
Hepner Hall, Room 109 ......................................................619-594-0780
Pre-Speech-Language Pathology
Speech, Language, and Hearing, Room 244..................619-594-2714
Preveterinary Medicine
Geology/Mathematics/Computer Science,
Room 323.
619-594-3030

## * Advisers in prelaw are not available during the summer months.

## COLLEGE OF ARTS AND LETTERS

## Assistant Dean

Arts and Letters, Room 202
619-594-6270
Africana Studies
Arts and Letters, Room 373...............................................619-594-6531
American Indian Studies
Arts and Letters, Room 331...............................................619-594-6991
Anthropology
Arts and Letters, Room 448 ..............................................619-594-5527
Arabic
Storm Hall West, Room 214............................................... 619-594-5268
Asia Pacific Studies
Arts and Letters, Room 473...............................................619-594-0931


## FOWLER COLLEGE OF BUSINESS

## Assistant Dean

Education and Business Administration, Room 448

619-594-5828
Fowler Center for Student Success
Education and Business Administration,
Room 448
619-594-5828
Undergraduate: https://business.sdsu.edu/undergrad
Accountancy
Finance
Financial Services
General Business
Information Systems
International Business (See College of Arts and Letters)
Management
Marketing
Real Estate
Graduate Business Advising Office
Education and Business Administration,
Room 448
619-594-8073
Graduate website: https://business.sdsu.edu/grad/office
MBA (various specializations)
MS in Accountancy
MS in Business Administration (various concentrations)
MS in Information Systems
MBA/MA in Latin American Studies
MBA/Juris Doctorate

## COLLEGE OF EDUCATION

(Degrees, Credentials, and Certificate Programs)
Assistant Dean for Student Affairs
Education and Business Administration, Room 346L

619-594-1426
Office for Student Success
Education and Business Administration,
Room 259
619-594-6320
Administrative, Rehabilitation and Postsecondary Education
Education and Business Administration,
Room 246
619-594-6115

## Certificate Programs

Cognitive Disabilities
Community College Teaching
Institutional Research, Planning, and Assessment
Psychiatric Rehabilitation
Rehabilitation Administration
Rehabilitation Counseling
Rehabilitation Technology
Workforce Education and Lifelong Learning
Supported Employment and Transition Specialist
*Child and Family Development
Education and Business Administration,
Room 259F (Undergraduate).
619-594-7035
Room 403 (Graduate). 619-594-5380

## Certificate Program

Early Childhood - Transdisciplinary Education and Mental Health (EC-TEaMH)
Counseling and School Psychology
North Education, Room 187
619-594-6109

## Service Credentials

Pupil Personnel Services
School Counseling
School Psychology
Dual Language and English Learner Education
Education and Business Administration,
Room 248
619-594-5155
*Bilingual Multiple and Single Subject credentials
Bilingual (Spanish) Special Education
Educational Leadership
North Education, Room 166.
619-594-4063
Administrative Services Credential
*Liberal Studies
Education and Business Administration,
Room 255. 619-594-6131

Master's Programs
See individual department listings
Doctoral Programs
See individual department listings
Nursing (Health Services - School Nurse)
Adams Humanities, Room 3133
619-594-5117
Social Work
Hepner Hall, Room 119
619-594-0780
Pupil Personnel Services
Child Welfare and Attendance School Social Work
Special Education
North Education, Room 70.
619-594-6665
*Early Childhood Special Education Added Authorization
Specialist Credentials
*Early Childhood Special Education
*Mild/Moderate Disabilities
*Moderate/Severe Disabilities
Certificate Programs
Behavior Analysis
Developing Gifted Potential
Speech, Language, and Hearing Sciences
Speech, Language, and Hearing, Room 244.................619-594-4787
Bilingual (Spanish) Special Education
Clinical-Rehabilitative Services
Teacher Education
Education and Business Administration, Room 255.

619-594-6131
Reading and Literacy Added Authorization
*Multiple Subject and Single Subject
Reading and Literacy Leadership Specialist
*Advising in Education and Business Administration, Room 259,
619-594-6320
COLLEGE OF ENGINEERING
Assistant Dean Engineering, Room 200B..................................................619-594-5807
Aerospace Engineering
Engineering, Room 308.....................................................619-594-6074
Civil, Construction, and Environmental Engineering Engineering, Room 424.

619-594-6071
Electrical and Computer Engineering Engineering, Room 426

619-594-0967
Mechanical Engineering Engineering, Room 326 .....................................................619-594-6067
COLLEGE OF HEALTH AND HUMAN SERVICES
Assistant Dean
Education, Room 154............................................................619-594-6151
Gerontology
Hepner Hall, Room 133.......................................................619-594-3870
Exercise and Nutritional Sciences
(Athletic Training, Foods and Nutrition, Kinesiology) Exercise and Nutritional Sciences, Room 359....

619-594-5161
Nursing
Adams Humanities, Room 3133 .........................................619-594-5117
Public Health
Hardy Tower, Room 109....................................................... 619-594-5803

Social Work
Hepner Hall, Room 133......................................................619-594-3870

Speech, Language, and Hearing Sciences Speech, Language, and Hearing, Room 244..................619-594-2714

## COLLEGE OF PROFESSIONAL STUDIES

## AND FINE ARTS



> *Office locations are subject to change due to construction. Check the website at http://psfa.sdsu.edu for current office locations.

## COLLEGE OF SCIENCES

Assistant Dean
Geology/Mathematics/Computer Science, Room 321

619-594-5350
Director of Advising
Geology/Mathematics/Computer Science,
Room 604
619-594-5142
Astronomy
Physics, Room 131...............................................................619-594-6240
Biology
Life Sciences, Room 135...................................................619-594-6442
Cellular and Molecular
Clinical Laboratory Science
Ecology
Evolutionary Biology
Marine Biology
Microbiology
Zoology
Chemistry and Biochemistry (Chemical Physics)
Geology/Mathematics/Computer Science, Room 209.

619-594-5595
Computer Science
Geology/Mathematics/Computer Science, Room 413

619-594-6191

## Environmental Sciences

Geology/Mathematics/Computer Science,
Room 237
619-594-5587
Geological Sciences
Geology/Mathematics/Computer Science,
Room 237

General Geology
Engineering Geology
Environmental Geosciences
Geophysics
Hydrogeology
Paleontology
Oceanography (Minor)
Health Professions Advising
Geology/Mathematics/Computer Science, Room 323.

619-594-3030
International Security and Conflict Resolution
Storm Hall, Room 223B.
619-594-3768
Mathematics and Statistics
Geology/Mathematics/Computer Science, Room 413

619-594-6191
Oceanography (Minor),
Geology/Mathematics/Computer Science,
Room 237
619-594-5586
Physics (Chemical Physics)
Physics, Room 131.
619-594-6240
Psychology Advising Center
Life Sciences, Room 105.
619-594-5412
Student Success Center
Geology/Mathematics/Computer Science, Room 429. 619-594-1116

## DIVISION OF ACADEMIC ENGAGEMENT AND

STUDENT ACHIEVEMENT
Assistant Dean, Administration, Room 220 .................... 619-594-5842

## Also advising in:

| Compact Scholars Program | 619-594-3810 |
| :---: | :---: |
| Interdisciplinary Studies in Three Departments. | 619-594-7715 |
| Undeclared Students, | ..619-594-7715 |
| Weber Honors College | 619-594-8071 |

## DIVISION OF GRADUATE AFFAIRS

## Assistant Dean

Student Services East, Room 1410
619-594-5213
Monday - Friday, 8 a.m. - 4:30 p.m.
Advisement concerning general requirements (except for the major) and administers the Interdisciplinary Studies master's degree. A departmental graduate adviser is available in all programs offering graduate degrees.

## SDSU IMPERIAL VALLEY

It is recommended that SDSU Imperial Valley students see an adviser prior to registration each semester. Call 760-768-5512 to schedule appointments with the advisers listed below.
The following advisers correspond to the various majors and programs.

## Undergraduate Division of Student Affairs

Criminal Justice, English, Student Ability Success Center Norma Aguilar..

760-768-5637
History, Liberal Studies, Social Science Americo Yacopi.

760-768-5503
International Business, Public Administration, Spanish
Aracely Bojorquez
760-768-5506
Latin American Studies, Mathematics
Miguel Rahiotis.
760-768-5598
Nursing
Helina H. Hoyt ....................................................................760-768-5680
Psychology, Imperial Valley University Partnership (IVUP),
Student Ability Success Center
Barbara B. Romero..
760-768-5509

## Graduate

M.A. in Education
Beatriz Wong........................................................................ 760-768-5551
M.S. in Nursing - Concentration in

Nursing Leadership in Health Care Systems
Beverly A. Carlson.
619-594-2766
Teacher Education, Division of Education
Beatriz Wong........................................................................ 760-768-5551

## Admission and Registration

## Reservation

San Diego State University reserves the right to select its students and deny admission to the university or any of its programs as the university, in its sole discretion, determines appropriate based on the applicant's suitability and the best interests of the university.

## Undergraduate Admission Policy

Admission to San Diego State University is selective. SDSU has been granted impacted status by the California State University system in order to assure that the educational experience, including the availability of classes and the array of services provided, of each enrolled student is not compromised by over enrollment. To this end, admission criteria OVER AND ABOVE THOSE REQUIRED BY THE CALIFORNIA STATE UNIVERSITY are now in effect. Meeting CSU minimum admission criteria will not guarantee admission to San Diego State University.

## Undergraduate Application Filing Period Fall Semester: October 1 - November 30

## Undergraduate Application Procedures

Prospective students applying for part-time or full-time undergraduate programs of study must submit a completed undergraduate application. Requirements for admission to San Diego State University are in accordance with Title 5, Chapter 1, Subchapter 3, of the California Code of Regulations. Apply online via http:// www.calstate.edu/apply.

The $\$ 70$ nonrefundable application fee is required upon submission and may not be transferred or used to apply to another term. The applications of persons denied admission to an impacted campus may be redirected to another campus at no cost, but only if the applicant is CSU eligible.

It is essential that the application be filled out completely and accurately. Misrepresenting oneself on the application will result in a revocation of admission regardless of when the misrepresentation is discovered.

## Application Acknowledgment

On-time applicants may expect to receive an acknowledgment from the campuses to which they have applied within two to four weeks of filing the application. The notice may also include a request that applicants submit additional records necessary to evaluate academic qualifications. Applicants may be assured of admission if the evaluation of relevant qualifications indicates that applicants meet CSU admission requirements, and in the case of admission impaction, supplemental criteria for admission to an impacted program. Unless specific written approval/confirmation is received, an offer of admission is not transferable to another term or to another campus.

## Supplementary Admission Criteria

Each campus with impacted programs or class-level admission categories uses supplementary admission criteria in screening applicants. Supplementary criteria may include rank-ordering of freshman applicants based on the CSU eligibility index or rank-ordering of transfer applicants based on verification of the Associate in Arts for Transfer (AA-T) or Associate in Science Transfer (AS-T) degrees, the overall transfer grade point average (GPA), completion of specified prerequisite courses, and a combination of campus-developed criteria. Applicants for freshman admission to impacted campuses or programs are required to submit electronic scores on either the SAT or the ACT, regardless of GPA. For fall admission, applicants should take tests as early as possible, but no later than November or December of their senior year of high school.

The supplementary admission criteria used by individual campuses to screen applicants are made available by the campuses to all applicants seeking admission to an impacted program.

## Undergraduate Admission Requirements

## First-Time Freshman Requirements

All first-time freshmen applicants must have graduated from high school, have earned a Certificate of General Education Development (GED), or have passed the California High School Proficiency Examination (CHSPE). Students will be admitted to the premajor (including undeclared) in which they applied. There will be a limited number of enrollment slots in each premajor. Applicants will be ranked by their Eligibility Index, which is a combination of GPA and SAT/ACT test scores. In addition, students must complete the pattern of college preparatory curriculum ("a-g" courses) with grades of C- or better by the end of spring 2020.

SDSU Service Area (Students who graduate from a high school in San Diego County located south of state route 56 and extending eastward AND Imperial County high schools).

Outside SDSU Service Area. First-time freshmen from outside SDSU's service area are required to live in on-campus housing for their first two years.

## Test Scores

Freshman applicants must submit electronic scores from either the Scholastic Aptitude Test (SAT) or the American College Test (ACT). The CSU uses only the SAT evidence-based reading and writing subscore and mathematics subscore in its admission eligibility equation. The SAT or ACT writing scores are not currently used by CSU campuses. You should take the test as early as possible but no later than early November if applying for fall admission. You may get registration forms and dates for these tests from your high school or college counselors or from the SDSU Testing Services website at http://studentaffairs.sdsu.edu/staar/ or contact the testing agencies at:

| The College Board (SAT) | ACT Registration Unit |
| :--- | :--- |
| Registration Unit, Box 6200 | P.O. Box 414 |
| Princeton, New Jersey 08541 | lowa City, lowa 52240 |
| 609-771-7588 | 319-337-1270 |
| http://www.collegeboard.org | http://www.act.org |
| CSU Code: 3594 | SDSU Code: 0398 |

Official scores should be requested from the testing service at the time you register and sent directly to SDSU.

## Eligibility Index

The eligibility index is the combination of the high school GPA and scores on either the ACT or SAT. GPA is based on grades earned in courses taken during the final three years of high school. Included in calculation of GPA are grades earned in all college preparatory "a-g" subject requirements, and bonus points for approved honors courses (excluding grades earned in physical education and military science courses).

Up to eight semesters of honors courses taken in the last three years of high school, including up to two approved courses taken in the 10th grade, can be accepted. Each unit of $A$ in an honors course will receive a total of 5 points; $\mathrm{B}, 4$ points; and $\mathrm{C}, 3$ points. No honor points are given for $D$ or $F$ grades.

A CSU eligibility index can be calculated by multiplying a GPA by 800 and adding the total score on the SAT examination (mathematics and critical reading on the old SAT or mathematics and Evidence-Based Reading and Writing on new SAT). For students who took the ACT, multiply the GPA by 200 and add 10 times the ACT composite score. Persons who are California high school graduates (or residents of California for tuition purposes), need a minimum index of 2900 using the old SAT, or 2950 using the new SAT or 694 using the ACT.

Persons who neither graduated from a California high school nor are a resident of California for tuition purposes need a minimum index of 3502 using the old SAT, 3570 using the new SAT or 842 using the ACT.

Graduates of secondary schools in foreign countries must be judged to have academic preparation and abilities equivalent to applicants eligible under this section. An applicant with a grade point average of 3.00 or above ( 3.61 for non-residents) is not
required to submit test scores. However, all applicants for admission are urged to take the SAT or ACT and provide the scores of such tests to each CSU campus to which they seek admission. Campuses use these test results for advising and placement purposes and may require them for admission to impacted majors or programs. Impacted CSU campuses require SAT or ACT scores of all applicants for freshman admission.

## Subject Requirements

San Diego State University requires that first-time freshman applicants complete, with grades of C - or better, a comprehensive pattern of college preparatory study totaling 15 units. A "unit" is one year of study in high school.

1. Two years of social science, including one year of U.S. history, or U.S. history and government;
2. Four years of English (literature and composition courses);
3. Three years of mathematics (algebra, geometry, and intermediate algebra; four years recommended);
4. Two years of laboratory science (one biological and one physical, both with laboratories);
5. Two years in the same foreign language (subject to waiver for applicants demonstrating equivalent competence);
6. One year of visual and performing arts courses selected from, dance, drama/theatre, music, or visual art (may complete two semester long courses selected from same discipline); and
7. One year of electives, selected from English, advanced mathematics, social science, history, laboratory science, foreign language, visual and performing arts, or other courses approved and included on the UC/CSU "a-g" list.
For fall admission, you must complete your subject requirements by the spring term before enrollment at SDSU.

## Subject Requirement Substitution for <br> Students with Disabilities

Applicants with disabilities are encouraged to complete college preparatory course requirements if at all possible. If you are judged unable to fulfill a specific course requirement because of your disability, alternate college preparatory courses may be substituted for specific subject requirements. Substitutions may be authorized on an individual basis after review and recommendation by your academic adviser or guidance counselor in consultation with the director of a CSU disabled student services program. You should be aware that failure to complete courses required for admission may limit your later enrollment in certain majors, particularly those involving mathematics. For further information and substitution forms, please call the director of disabled student services at your nearest CSU campus.

## Freshmen Who are Graduates of High Schools in Foreign Countries

Graduates of secondary schools in foreign countries must be judged to have equivalent academic preparation and abilities equivalent to applicants eligible under this section. Please submit your high school transcript shortly after applying for admission.

All undergraduate applicants, regardless of citizenship, who do not have at least three years of full-time study in schools at the secondary level or above where English is the principal language of instruction, must present a score of 550 or higher (using the paper version) or 80 or higher (using the Internet version) on the Test of English as a Foreign Language (TOEFL) or 6.5 or better on the International English Language Testing System (IELTS) or 58 or higher on the Pearson Test of English Academic (PTE Academic).

## Early Notification of Admission

The university may offer early notification of admission to firsttime freshman applicants who report an exceptional high school record and test scores.

## Admitted First-Time Freshman

All first-time freshman applicants who receive an offer of admissions are admitted provisionally. Offers of admission will be rescinded if senior year work is not completed at a satisfactory level or if any requirements were misrepresented on the application.

## Freshman Academic Success Track (FAST)

All California resident first-time freshmen admitted to San Diego State University who do not demonstrate college readiness in written communication and/or mathematics will be required to enroll in the Freshman Academic Success Track (FAST) program in the summer prior to fall enrollment. All students attending a CSU who do not demonstrate college readiness are required to participate in Early Start or a summer program such as FAST to better prepare them in written communication and/or mathematics.

The goals of the FAST program are to:

- Better prepare students in written communication and/or mathematics before the fall semester of freshmen year;
- Add an important and timely assessment tool in preparing students for college; and
- Improve students' chances of successful completion of a college degree.
Newly admitted freshmen students who are required to complete the FAST program will be notified of the requirement and options for completing the program as part of campus communications to newly admitted students. More information regarding the FAST program is available at http://www.sdsu.edu/ summeradmits.


## The California Promise

The California Promise Program enables a specific number of CSU campuses to establish pledge programs for entering firsttime students who are both interested and able to complete baccalaureate degrees in four years. All campuses have established programs for students with Associate Degrees for Transfer from any California Community College to complete their baccalaureate degrees in two years. The program is limited to students who are residents of California.

Students who commit to enter either the four-year or two-year pledge will be given a priority registration appointment for each state-supported enrollment period and will be provided with routine and thorough academic advisement. In order to remain in the program, students must meet with their advisers as prescribed, develop an enrollment plan, and complete 30 semester units or the quarter equivalent within each academic year, including summer. Participating campuses may stipulate other requirements as well. Interested students entering the CSU should contact campus offices or visit https://www2.calstate.edu/apply/fresh-man/getting_into_the_csu/pages/the-california-promise-program.aspx. On the San Diego State University campus, contact Dr. Norah P. Shultz, Associate Vice President for Academic Affairs - Student Achievement, Division of Academic Engagement and Student Achievement.

## High School Students

High school students may be considered for enrollment in certain special programs if recommended by the principal and the appropriate campus department chair and if preparation is equivalent to that required of eligible California high school graduates. Such admission is only for a specific course and does not constitute a right to continued enrollment.

## Transfer Student Requirements

Students who have completed 60 or more transferable semester college units ( 90 or more quarter units) are considered upper division transfer students. Students who complete college units during high school or through the summer immediately following high school graduation are considered first-time freshmen and must meet those admission requirements. Transferable courses are those designated for baccalaureate credit by the college or university offering the courses. The CSU General Educa-tion-Breadth (GE-Breadth) program allows California community college transfer students to fulfill lower-division general education requirements for any CSU campus prior to transfer. Up to 39 of the 48 GE -Breadth units required can be transferred from and certified by a California college. "Certification" is the official notification from a California community college that a transfer student has completed courses fulfilling lower-division general education requirements. The CSU GE-Breadth certification course list for particular community colleges can be accessed at http://www. assist.org.

## Lower Division Transfers

Students who have completed fewer than 60 transferable semester college units (fewer than 90 quarter units) are considered lower division transfer students. San Diego State University is not accepting applications from lower division transfer students. Due to increased enrollment demands, most CSU campuses do not admit lower division transfer applicants.

## Upper Division Transfers

A student is considered an upper division transfer student if he/she has completed 60 or more semester units (or 90 or more quarter units) of transferable baccalaureate-level college work. In recent years, as the number of applicants has far exceeded the number of spaces available, it has become necessary to adopt admission standards which are more demanding than the minimum California State University (CSU) requirements. Per CSU Enrollment Policy, transfer admission priority is given to applicants whose previous coursework was completed at California community colleges.

All students who are admitted to SDSU are admitted to a premajor. To be eligible for admission to SDSU, transfer applicants should meet the following minimum CSU eligibility requirements and SDSU requirements.

1. Apply during the CSU initial admission application filing period, October/November for fall admission in the following year. Submit a supplemental application at http://www.sdsu. edu/portal, which is due by 11:59 p.m. (PST), January 22, 2020.
2. Complete a minimum of 60 transferable semester units by the end of spring 2020. Transferable units are defined as course units that are applicable to a baccalaureate degree.
3. Complete a certified GE package of 39 units (CSU GE or IGETC) or any applicable lower division GE pattern listed in the SDSU General Catalog, including completion of the "Golden Four" General Education (GE) requirements in written communication, oral communication, critical thinking, and mathematics with a grade of C - (1.7) or better in each course by the end of spring 2020.
4. Complete all major preparation courses listed in the SDSU General Catalog by the end of the spring term prior to fall admission. If a major preparation course is not offered at your community college, you must take it at another local community college or via Cross Enrollment or Open University at SDSU by the end of spring 2020.
5. Meet the cumulative grade point average (GPA) required for the major as listed in the SDSU General Catalog. See http:// www.sdsu.edu/majorgpa to determine the GPA required for your major. Your GPA is based on all transferable units attempted.
a. For non-SDSU service area* applicants, an additional overall GPA will be required. This GPA is determined based on the applicant pool and may be higher than the GPA required for the major.
b. All applicants must meet the required GPA at the time of application and maintain the GPA through the end of spring 2020.
6. Applicants with prior SDSU Regular Session, Special Session, Open University or Cross Enrollment, coursework must have a minimum SDSU GPA of 2.0 in addition to the cumulative GPA listed above.
7. Local, service-area* applicants who meet the criteria listed above and who meet the cumulative GPA required for the major will have admission priority for fall 2020. All other applicants will be admitted on a space-available basis and must meet requirements (1) through (6) above.
*Students are in SDSU's service area if 100\% of their transferable credits have been completed at Cuyamaca, Grossmont, Imperial Valley, San Diego City, San Diego Mesa, San Diego Miramar, or Southwestern colleges by the end of the spring prior to fall admission (e.g. spring 2020 for fall 2020 admission).

## NOTE:

- The Transfer Admission Guarantee does not apply to applicants to athletic training, dance, music, nursing, social work, theatre arts with an emphasis in performance, or any major for which there is an SDSU approved Associate Degree for Transfer (ADT), Associate in Arts for Transfer (AA-T)/ Associate in Science for Transfer (AS-T) degree.
- Nursing applicants must also complete the SDSU supplemental application and meet additional ranking criteria.
- Music and dance applicants must pass an audition for acceptance to the major. For details, see the School of Music and Dance website at http://music.sdsu.edu.
- Theatre arts with emphasis in performance applicants must pass an audition for acceptance to the major. For information, visit http://ttf.sdsu.edu/index.php/degree_programs/ general_auditions
- SDSU is only accepting applications for students seeking a second bachelor's degree in nursing.
- Students with international coursework must submit an international course evaluation report.


## Associate Degrees for Transfer (AA-T or AS-T)

The Associate in Arts for Transfer (AA-T) and the Associate in Science for Transfer (AS-T) degrees offered at the California Community College (CCC) are designed to provide a California community college student the optimum transfer preparation and a clear admission pathway to the CSU degree majors.

CCC students who earn an Associate Degree for Transfer (AA-T or AS-T) are guaranteed admission with junior standing to a CSU and given priority admission over other transfer applicants when applying to a local CSU campus, or non-impacted CSU program. AA-T or AS-T admission applicants are given limited priority consideration based on their eligibility ranking to an impacted campus/program or to campuses/programs that have been deemed similar to the degree completed at the community college. Students who have completed an AA-T/AS-T in a program deemed similar to a CSU major are able to complete remaining requirements for graduation within 60 semester ( 90 quarter) units. It is the responsibility of the student who has earned an AA-T/AS-T to provide documentation of the degree to the CSU campus.

## Admitted Upper Division Transfers

Transfer admission decisions are based on self-reported information. Admission is provisional pending verification of the self-reported information on the applicant's Cal State Apply and supplemental applications using the official transcript submitted to the Office of Admissions. Offers of admission will be rescinded if the GPA, completed courses, or course grades are lower than what is reported on the applications or if the student misses any admission deadlines.

## Acceptance of Transfer Courses

Courses taken at a regionally accredited college or university and designated as appropriate for baccalaureate credit by that institution will be accepted by San Diego State University for credit toward transfer admission. San Diego State University reserves the right to determine the extent to which such credit satisfies the specific and elective requirements of degree programs.

Courses completed at regionally accredited institutions not offering the baccalaureate and at special-purpose baccalaure-ate-granting institutions are acceptable if specifically certified by the institution or by San Diego State University as similar in level and rigor to SDSU courses.

Courses completed at institutions without regional accreditation or taken at a regionally accredited institution as part of a professional program, i.e., medical, dental, legal, veterinary, optical, etc. are not normally accepted by San Diego State University. Such courses may be accepted on an individual basis if a review by the appropriate department determines comparability to a course in the San Diego State University curriculum.

## Adult Students

As an alternative to regular admission criteria, an applicant who is 25 years of age or older may be considered for admission as an adult student if he or she meets all of the following conditions:

1. Possesses a high school diploma (or has established equivalence through either the General Educational Development or California High School Proficiency Examinations).
2. Has not been enrolled in college as a full-time student for more than one term during the past five years. Part-time enrollment is permissible.
3. If there has been any college attendance in the past five years, has earned a 2.0 GPA or better in all college work attempted.
4. Test results verifying completion of the current San Diego State University mathematics and writing competency requirements. Current competency requirements and minimum test scores are published in the SDSU General Catalog and each semester's Class Schedule; the most recent published scores will be required.
Applicants seeking admission as an adult student must submit a statement of no more than two pages describing the alternate preparation which the applicant feels has prepared him or her for successful university work. The statement should also describe the applicant's educational goals and what preparation has been made to pursue these goals. Consideration for admission will be based upon a judgment as to whether the applicant is as likely to succeed as a regularly admitted freshman or transfer student and will include an assessment of basic skills in the English language and mathematical computation.

## Appeal of Admission Decision

Section 89030.7 of the California Education Code requires that the CSU establishes specific requirements for appeal procedures for a denial of admission. Each CSU campus must publish appeal procedures for applicants denied admission to the university. Detailed instructions regarding the appeals process are available at https://admissions.sdsu.edu/about_sdsu/ admission_appeals_process.

All appeals must be received by SDSU within 30 days of date of the denied notification from the SDSU Office of Admissions. Students who were denied admission may only submit one appeal per admission term. To have an appeal reviewed, students must submit a complete packet which includes the following: admissions appeal request form, letter addressing the basis of the appeal, and supporting documentation. The appeal request must be mailed to:

## University Admissions Appeals Committee

Office of Admissions
San Diego State University
5500 Campanile Drive
San Diego, CA 92182-7455
Appeal decisions will be provided within six to eight weeks of submission of a complete appeal package. Applicants will be notified of their appeal decision by mail using the address on file in the SDSU Office of Admissions.

## Readmission

Students interested in readmission to SDSU should visit the website at https://admissions.sdsu.edu/ for the most up-to-date admission criteria. Criteria differ for students who left the university in good academic standing versus those who left on academic probation or who were academically disqualified. Students who have been disqualified twice from SDSU will not be considered for reinstatement. Students with prior SDSU enrollment through regular session, special session, Open University, or cross-enrollment must have a minimum SDSU GPA of 2.0 in all coursework, in addition to meeting all other transfer admission requirements.

## International (Foreign) Student Admission Requirements

San Diego State University offers opportunities for undergraduate and graduate study to international students whose academic preparation meets the standards for admission. International applicants include those who hold U.S. temporary visas as students, exchange visitors, or in other non-immigrant
classifications. SDSU uses separate requirements in the admission of international students. Verification of English proficiency (see section on English Language Requirement for undergraduate applicants), financial resources, and academic performance are each important considerations for admission.

SDSU will begin accepting applications for admission from firsttime freshmen and upper division transfer students (60 or more transferable semester units, or 90 or more transferable quarter units) and applicants seeking a second bachelor's degree in nursing on October 1. SDSU is not accepting applications from lower division transfers (1-59 transferable units) or those seeking a second bachelor's degree other than nursing.

APPLICATION DEADLINES: First-time freshmen international applicants must apply between October 1 and April 1. Transfer international applicants must apply between October 1 and November 30. All students applying to dance, music, nursing, or theatre arts (performance) must apply between October 1 and November 30.

## International Freshmen

- Applicants must submit official transcripts/grade reports for each year of study completed (i.e., grades 9-12 or grades 10-12) to the SDSU Office of Admissions. Applicants must also submit a certified copy of diploma or graduation certificate, if earned. If the transcript or academic record is not issued in English, applicant will be required to send a certified literal English translation of each document, which can come directly from the school itself or from a professional, certified translator. The translation must contain all information shown on the original language document. The official transcript/academic record must be sent in a sealed envelope directly from the school, or a ministry of education.


## International Transfers

## Upper Division Transfer Applicants Only

- Applicants who have international coursework must submit an International Evaluation Service Report to SDSU. To submit the report, applicant must submit official international transcripts and documents directly to the address listed below and request the Detailed Report with Course Level Identification.


## International Education Research Foundation, Inc.

P.O. Box 3665

Culver City, CA 90231
http://www.ierf.org
310-258-9451

- Applicants who have attended both U.S. schools and schools outside the U.S. must submit the International Evaluation Service Report and have academic transcripts from all U.S. schools attended sent directly to the SDSU Office of Admissions.
- Eligibility for admission will be based on the information that is provided on the admission application, the International Evaluation Service Report, U.S. transcripts (if U.S. schools were attended), and TOEFL scores, if required.


## Majors with Special Instructions

- Athletic training majors transferring from two-year or four-year colleges/universities must submit a separate application to the School of Exercise and Nutritional Sciences in addition to the Cal State Apply application. Additional admission criteria are required for acceptance to the athletic training major and the university. For more information, visit the School of Exercise and Nutritional Sciences website at http://athletictraining.sdsu. edu/.
- Music and dance majors that meet the CSU admissions requirement must successfully pass an audition for acceptance to the major and the university. Auditions will be held in February for fall admission.
- Nursing majors transferring from two-year or four-year colleges/universities, or those seeking a second bachelor's degree, must complete a supplemental application in addition to the Cal State Apply application. Additional admission criteria are required from transfer students for the major. For more information, visit the School of Nursing website at http://nursing.sdsu.edu.
- Theatre arts with an emphasis in performance majors that meet the CSU admissions requirement must successfully pass an audition for acceptance to the major and the university. Auditions will be held in February for fall admission.
Applicants whose major education has been in a language other than English must score 550 or higher (using the paper version) or 80 or higher (using the Internet version) on the Test of English as a Foreign Language (TOEFL) or 6.5 or better on the International English Language Testing System (IELTS) or 58 or higher on the Pearson Test of English Academic (PTE Academic). These tests are administered in most foreign countries. The university must receive official test scores before admission can be granted. Information as to the time and place at which these tests are given may be obtained by going to http://www.TOEFL.org, http://www.ielts.org, or http://www.pearsonpte.com.

Upon arrival at San Diego State University, additional tests of English may be given for the purpose of placing students in an English language program commensurate with their linguistic ability in English and to assist advisers in planning an appropriate course of study. Depending upon placement test results and academic background, students may be required to enroll in one or more English language courses during their first year. Foreign students admitted to the university will be subject to the same competency and placement examinations and standards that govern the rest of the student population.

Insurance Requirement: As a condition of receiving an I-20 or DS2019 form, all F-1 and J-1 visa, applicants must agree to obtain and maintain health insurance as a condition of registration and continued enrollment. Such insurance must be in amounts as specified by the United States Information Agency (USIA) and National Association of Foreign Student Advisers (NAFSA). The campus president or designee shall determine which insurance policies meet these criteria. Further information may be obtained from the International Student Center or go to http://www.sdsu. edu/international.

American Language Institute: If English instruction is needed prior to admission to SDSU, students may enroll in the American Language Institute (ALI). The ALI offers academic preparation in English language reading, writing, and listening skills necessary for university success.

Housing and Scholarship: Arrangements for housing should be completed well in advance of the student's arrival on the campus. Detailed information regarding housing may be obtained from the Office of Housing Administration website at http://www.sdsu.edu/ housing. Scholarship aid for entering international students is limited. All admitted international students will be required to provide evidence of funding for a minimum of one academic year.

Upon arrival at SDSU, the student should contact the International Student Center.

## English Language Requirement

All undergraduate applicants, whose native language is not English, and who have not attended schools at the secondary level or above for at least three years of full-time study (only transferable courses count toward a student's full-time status) where English is the principal language of instruction, must present a score of 550 or higher (using the paper version) or 80 or higher (using the Internet version) on the Test of English as a Foreign Language (TOEFL) or 6.5 or better on the International English Language Testing System (IELTS) or 58 or higher on the Pearson Test of English Academic (PTE Academic). Some majors may require a higher score. Some campuses may also use alternative methods of assessing English fluency: Pearson Test of English Academic (PTE Academic), the International English Language Testing System (IELTS), and the International Test of English Proficiency (ITEP).

## Filing of Documents

If admitted, official documents for international applicants must be on file no later than May 1 for fall admission. (See "Filing of Records" for details.)

## Other applicants

Applicants not admissible under one of the above provisions should enroll in a community college or other appropriate institution.

San Diego State University also offers a special program designed to expand educational opportunity for capable persons who, for a variety of reasons, have not previously had the opportunity. For detailed information regarding admission to this program, refer to the section of this catalog on the Educational Opportunity Program.

## Filing of Records

File Official Transcripts. You must file the following official transcripts with the Office of Admissions.

1. Transcripts from EACH high school(s) attended (not required of the graduate student who holds a bachelor's degree from an accredited institution, but is required of the student who holds a bachelor's degree from a nonaccredited institution).
2. Transcripts from EACH college attended (including extension, correspondence, summer session, evening, and out-of-country courses), even if no courses were completed. Graduate students must file recently issued transcripts (printed within the last year) if they plan to enter a master's degree or credential program. Electronic transcripts are required from many colleges. Check the Office of Admissions website at http:// www.sdsu.edu/admissions for a complete list.
3. Photostat or true copy of the military separation form DD-214 (or equivalent), DD-295, Joint Service Transcripts (JST) if applicant has had active military service. (Not required of graduate students.)
For a hard copy transcript to be official, it must bear the high school or college seal and remain in its original sealed envelope. All records or transcripts received by the university become the property of the university and will not be released nor will copies be made.

## Deadlines:

First-time Freshmen

- May 1 - transcripts including fall term grades.
- July 15 - transcripts including spring term grades.

Transfers

- May 1 - transcripts including fall term grades and work in progress.
- June 30 - transcripts including spring term grades.


## Graduate and Post-Baccalaureate Admission Requirements

## Application and Admission Process

Admission to San Diego State University for graduate study is a competitive process and open to those applicants who the university judges to be fully qualified to benefit from graduate study. The requirements listed below are the minimum required for admission to the university. Many programs have established additional requirements. Potential applicants should refer to the Graduate Bulletin under the departmental listings. Students in their final baccalaureate year who are contemplating graduate study are also advised to contact the departmental offices as soon as possible for information and advice. Some departments stop reviewing applications earlier than others because space is limited.

## Application Procedures

Applicants for any type of graduate or post-baccalaureate status (advanced degree applicants and those seeking credentials or advanced certificates) must file an electronic CSU Graduate Admission Application available at http://www.calstate.edu/apply within the appropriate filing period. All applicants, including those who graduated from San Diego State University are also required to complete and submit an application and the $\$ 70$ nonrefundable, nontransferable application fee. All masters, doctoral, and credential students should consult the department or program listing in the Graduate Bulletin for the specific department and/or program application instructions. In all cases, applicants should send recently issued official transcripts (printed within the last year) from all institutions attended and examination scores to

Graduate Admissions only. Students are required to apply online. Online applications are available at http://www.calstate.edu/ apply.

## Admission Requirements

Graduate and post-baccalaureate applicants may apply for a degree objective, a credential or certificate objective, or where approved, may have no program objective. Depending on the objective, the CSU will consider an application for admission as follows:

- General Requirements. The minimum requirements for admission to graduate and post-baccalaureate studies at a CSU campus are in accordance with university regulations as well as Title 5, Chapter 1, Subchapter 3 of the California Code of Regulations. Specifically, a student shall at the time of enrollment must: (1) hold an acceptable baccalaureate degree earned at an institution accredited by a regional accrediting association, or have completed equivalent academic preparation as determined by the graduate dean; (2) have attained a grade point average of at least 2.85 in an acceptable earned baccalaureate degree, or at least 2.85 in the last 60 semester ( 90 quarter) units attempted, or hold an acceptable post-baccalaureate degree earned at an institution accredited by a regional accrediting association; (3) have been in good standing at the last institution attended; and (4) achieved satisfactory scores on all sections of the GRE or GMAT for degree seeking applicants (not required for credential or certificate applicants).
Applicants who do not qualify for admission under provisions (1) and (2) may be admitted by special action if the graduate dean determines that there is other academic or professional evidence sufficient to warrant such action. Applicants from foreign countries see International (Foreign) Student Admission Requirements.
The Division of Graduate Affairs is the only official admissions authority for graduate study at San Diego State University. See the Graduate Bulletin for further details.

Faculty may register for courses in accordance with the Division of Graduate Affairs policies. Faculty holding the rank of instructor and above may be candidates for degrees on this campus. Faculty may not seek degrees or register for courses within their own departments, programs, or schools and retain faculty status in that unit.

Students who meet the minimum requirements for graduate and post-baccalaureate studies may be considered for admission in one of the following categories:

- Post-Baccalaureate Standing (Unclassified). Exchange students (non-foreign), visitors from other CSU campuses, and other transitory students may be admitted for one semester as unclassified graduate students; or
- Post-Baccalaureate Standing (Classified). A student wishing to be admitted to a program leading to a credential only or to an advanced certificate only (not an advanced degree) who meets the criteria specified under General Admission Requirements. A student must also meet the professional, personal, scholastic, and other standards prescribed by the appropriate department and the Graduate Council; or
- Post-Baccalaureate Standing (Conditionally Classified). A student wishing to be admitted to a program of study leading to a credential only, or to an advanced certificate only (not an advanced degree), who meets the criteria specified under General Admission Requirements, but who has deficiencies that can be met by specific additional preparation, including qualifying examinations; or
- Graduate Standing (Classified). A student wishing to be admitted to a program of study leading to an advanced degree who meets the criteria specified under General Admissions Requirements; or
- Graduate Standing (Conditionally Classified). A student wishing to be admitted to a program of study leading to an advanced degree who meets the criteria specified under General Admission Requirements but who has deficiencies that can be met by specific additional preparation, including qualifying examinations.
Potential applicants should refer to the Graduate Bulletin under Admission and Registration, for further details.


## Graduate and Post-Baccalaureate English Language Requirement

All graduate and post-baccalaureate applicants, regardless of citizenship, whose native language is not English and whose preparatory education was principally in a language other than English must demonstrate competence in English. Those who do not possess a bachelor's degree from a postsecondary institution where English is the principal language of instruction must receive a minimum score of 550 or higher (using the paper version) or 80 or higher (using the Internet version) on the Test of English as a Foreign Language (TOEFL). Students must obtain a score of 6.5 or better on the International English Language Testing System (IELTS) or 58 or higher on the Pearson Test of English Academic (PTE Academic). Individual degree programs may require a higher minimum score. Applicants may be required by a program to submit a score for the Test of Written English (TWE). Several CSU campuses may use alternative methods for assessing fluency in English, including Pearson Test of English Academic (PTE Academic), the International English Language Testing System (IELTS), and the International Test of English Proficiency (ITEP).

## Second Bachelor's Degree

San Diego State University is only accepting applications for a second bachelor's degree in nursing. To be eligible for admission to the second bachelor's degree in nursing, students must meet the following minimum CSU eligibility requirements and SDSU requirements.

1. Students are required to apply during the CSU initial admission application filing period, October/November for fall of the following year. They must file an electronic CSU Undergraduate Admission Application available at http://www.calstate. edu/apply by November 30.
2. Applicants are subject to admission related deadlines for undergraduate transfer students.
3. Applicants must have previously earned a baccalaureate degree from a college/university accredited by a regional accrediting association.
4. Applicants must complete all major preparation/prerequisite courses listed in the SDSU General Catalog by the end of the spring term prior to fall admission.
5. Applicants must meet the cumulative grade point average (GPA) required for the nursing major in all transferable courses attempted at all regionally accredited universities, colleges, and community colleges completed as an undergraduate, independent of when the degree was granted; or meet the nursing GPA requirement in at least the last 60 semester/90 quarter units attempted of baccalaureate or graduate level courses.
» Applicants must meet the required GPA at the time of application and maintain the GPA through the end of spring 2020 for fall 2020.
6. Applicants with prior SDSU regular semester, Special Session, Open University, or cross enrollment coursework, must have a minimum SDSU GPA of 2.0, in addition to the cumulative GPA listed above.
7. Classified graduate students are not eligible to apply for a second bachelor's degree.
Second bachelor's degree in nursing students are accepted as unclassified post-baccalaureate which means they are subject to graduate fees. Credit earned while a second bachelor's candidate may not be applied toward an advanced degree at a later date. Candidates for a second bachelor's degree are ineligible to enroll in 600-, 700-, 800-, and 900-numbered courses.

To receive a second bachelor's degree in nursing, the student must complete a minimum of 30 post-baccalaureate units in residence at SDSU, of which at least 15 units must be upper division courses in the nursing major (numbered 300-599). Students must fulfill all current preparation for major and major requirements. In addition they must meet the following GPA requirements:

- 2.0 minimum SDSU grade point average based on all courses attempted at SDSU.
- 2.0 minimum major grade point average based on all upper division courses attempted in the major department. Upper division courses required for the major but taught outside the major department are also included in the grade point average.
Students seeking a second bachelor's degree in nursing have the following requirements either deemed complete or waived based on their first baccalaureate degree from a college/university accredited by a regional accrediting association:
- English and mathematics competency requirements;
- The Graduation Writing Assessment Requirement (GWAR);
- American Institutions Requirement;
- Residence Requirement for General Education;
- General Education requirements in sections I, II, III, and IV; and - International Experience.

Students seeking a second bachelor's degree in nursing are subject to the undergraduate policies and procedures governing deadlines, academic probation and disqualification, catalog rights, continuous enrollment, distinction in their major for graduation, and course repeat policies. They are not eligible for course forgiveness or graduation with honors. They are not eligible to declare an additional minor, major, or to change their major from the initial second bachelor's degree program.

The second bachelor's degree in nursing is not granted automatically. Students must take the initiative to apply for graduation using the undergraduate graduation application. See Graduation Requirements - Application for Graduation for additional information

## Intrasystem and Intersystem Enrollment Programs

Students enrolled at San Diego State University have access to courses at other CSU campuses on a space available basis unless those campuses or programs are impacted or desired programs or admission categories are closed. This access is offered without students being required to be admitted formally to the host campus and sometimes without paying additional fees. Although courses taken on any CSU campus will transfer to the student's home CSU campus as elective credit, students should consult their San Diego State University academic adviser to determine how such courses may apply to their specific degree programs before enrolling at the host campus.

The academic calendar lists specific deadlines. For students participating in the CSU visitors' program, units completed at the visitor campus will be considered resident units; they will not, however, be calculated into the San Diego State University grade point average.

There are two programs for enrollment within the CSU and one for enrollment between CSU and the University of California or California community colleges. Additional information about these programs is available from the Office of the Registrar.

## CSU Fully Online Courses

Matriculated students in good standing may request enrollment in one course per term, offered by a CSU host campus. Enrollment requests will be granted based on available space, as well as completion of any stated prerequisites. Credit earned at the host campus is electronically reported to the student's home campus to be included on the student's transcript at the home campus. Before enrolling in a CSU fully online course at another CSU, SDSU students should consult with their academic adviser to determine if the course can be applied towards their degree requirements.

## CSU Visitor Enrollment

Matriculated students in good standing may enroll on a space available basis at San Diego State University and a host CSU campus during the same term. Credit earned at the host campus is reported at the student's request to San Diego State University to be included on the student's transcript at the home campus.

## Intersystem Cross Enrollment

Matriculated CSU, UC, or community college students may enroll on a "space available" basis for one course per term at another CSU, UC, or community college and request that a transcript of record be sent to the home campus. Students who wish to enroll in a course via cross enrollment must select a class that does not have an active wait list. This program is not open to students who have completed four-year undergraduate degrees.

## Impacted Programs

The CSU designates programs as impacted when more applications from regularly eligible applicants are received in the initial filing period (October and November) than can be accommodated. All majors at San Diego State University are impacted. Students who are admitted to SDSU are placed in a premajor (including undeclared).

All premajors must meet department-specific criteria to move from the premajor to the major, such as a specified minimum grade point average, completion of prerequisite courses, tests, and completion of a certain number of units.

Criteria are described in the "Course Information and Programs" section of this catalog or you may contact the major department for information. The CSU will announce during the fall filing period the supplementary criteria campuses will use for impacted programs. Detailed impaction information is available at http://www2.calstate.edu/attend/impaction-at-thecsu. Information about the supplementary criteria is also provided to program applicants. For further information visit https:// advising.sdsu.edu/majors/impacted_majors.

Applicants must file applications for admission to an impacted program during the initial filing period. Applicants who wish to be considered in impacted programs at more than one campus should file an application at each campus for which they seek admission consideration.

## Assessment of Academic Preparation and Placement

The CSU requires that all entering freshmen students be evaluated in terms of their preparation to complete first-year courses in written communication and mathematics/quantitative reasoning. This evaluation will utilize the broadest set of multiple measures including high school grades as well as performance scores on standardized examinations such as the ACT or SAT. This evaluation of academic readiness is not a condition for admission to the CSU, but it is an important step for determining the best course placement for entering students.

Successful completion of general education (GE) written communication and mathematics/quantitative reasoning courses in the first year of CSU enrollment establishes a foundation for continuous learning. Unless the requirements have been completed, freshmen shall enroll in GE written communication and mathematics/quantitative reasoning courses appropriate to each student's major and skill level, as demonstrated by applicable systemwide standards utilized in the review of academic preparation.

Students whose skill assessments indicate academic support will be needed for successful completion of GE in written communication or mathematics/quantitative courses shall enroll in appropriate college-level, baccalaureate credit-bearing courses that strengthen skills development to facilitate achieving the appropriate general education student learning outcomes. Supportive course models may include, among others, co-requisite approaches, supplemental instruction or "stretch" formats that extend a course beyond one academic term. In these approaches, instructional content considered pre-baccalaureate may carry a maximum of one unit and shall be offered concurrently with a col-lege-level, baccalaureate credit-bearing course.

## Placement Measures for First-Year General Education Written Communication and Mathematics/Quantitative Reasoning Courses

Freshman skills assessment and placement for general education written communication and mathematics/quantitative reasoning shall be based on systemwide skills assessment standards that include the Early Assessment Program/Smarter Balanced Achievement Levels, ACT scores and/or SAT scores, high school coursework, high school GPA and mathematics GPA. Skills assessments are not a condition for admission to the CSU; they are a condition of enrollment.

These skills assessments are designed to inform entering freshmen of placement in appropriate baccalaureate-level courses based on their skills and needs. First-time freshmen in need of support as determined by the skills assessment will be placed in supported instruction. Supported instruction is designed to assist students in creditbearing courses. Students may also be required to participate in the Freshman Academic Success Track summer program. FAST gives students the opportunity to earn college credit in written communication and/or mathematics/quantitative reasoning the summer before their first term.

## Assessments and Placement for General Education Written Communications

## Has Fulfilled the General Education Subarea A2 English

 RequirementThe student has met the requirement via completion of one of the following:

## Advanced Placement (AP) Test

- 3 or above: AP Language and Composition;
- 3 or above: AP Literature and Composition.

International Baccalaureate (IB) Test

- 4 or above on English A: Language and Literature Higher Level (HL);
- 4 or above on English A: Literature Higher Level (HL).


## College Level Examination Program (CLEP)

- 50 or above: College Composition or College Composition Modular.


## College Transfer Coursework

- Completed approved college course that satisfies CSU GE Area A2 (written communication) with a grade of C- or better.
Placement in a General Education Subarea A2 English Course

The student has met examination standards and/or multiple measures-informed standards via one of the criteria below:

## English CAASPP/EAP Test

- Standard Exceeded;
- Standard Met and completed 12th grade approved yearlong English course (ERWC, AB, IB, Weighted Honors) with a grade of C- or better.


## English New SAT Test*

- 550 or above;
. 510 - 540 and completed 12th grade approved yearlong English course (ERWC, AB, IB, Weighted Honors) with a grade of C - or better.
English ACT Test
- 22 or higher;
- 19-21 and completed 12th grade approved yearlong English course (ERWC, AB, IB, Weighted Honors) with a grade of C- or better.
High School Courses and GPA
- Weighted GPA 3.3 or above;
- GPA 3.0 or above and completed approved senior yearlong English course (AP, ERWC, Honors );
- GPA 3.0 or above and completed honors English;
- GPA 3.0 or above and five or more years of high school English.


## Placement in a Supported General Education Subarea

 A2 English CourseThe student has met examination standards and/or multiple measures-informed standards via one of the criteria below:

## English New SAT Test*

- 510 - 540 and four or more years of high school English.
*SAT score conversion for scores prior to March 2016 (old SAT): https://
collegereadiness.collegeboard.org/sat-scoring-beforemarch-2016.


## ACT Test

-19-21 and four or more years of high school English.

## High School Courses and GPA

- Weighted GPA 3.0 or above and four or more years of high school English.
Placement in a Supported General Education Subarea
A2 English Course and Participation in the Early Start Program Required

Based on multiple measures evaluation, student needs additional academic support including participation in the SDSU Freshman Academic Success Track (FAST) summer program.

## Assessments and Placement for General Education Mathematics/Quantitative Reasoning: Non-Mathematics Intensive Majors (Algebra and Statistics Disciplines, Non-STEM and Undecided Majors)

Has Fulfilled the General Education Subarea B4 Mathematics/Quantitative Reasoning Requirement

The student has met the requirement via completion of one of the following:
Advanced Placement (AP) Test

- 3 or above: AP Calculus AB;
- 3 or above: AP Calculus BC;
- 3 or above: AP Statistics;
- 3 or above: AP Computer Science Principles.


## International Baccalaureate (IB) Test

- 4 or above on Mathematics Higher Level (HL);
. 4 or above on Computer Science Higher Level (HL).


## College Level Examination Program (CLEP)

- 50 or above: Calculus, College Algebra, College Mathematics, or Pre-Calculus.


## College Transfer Coursework

- Completed mathematics/quantitative reasoning college course with a grade of C - or better that satisfies CSU General Education Area B4.


## Placement in a General Education Subarea B4

Mathematics/Quantitative Reasoning Requirement
The student has met examination standards and/or multiple measures-informed standards via one of the following criteria:

## CAASPP/EAP Mathematics Examination

- Standard Exceeded;
- Standard Met and completed 12th grade approved yearlong mathematics course beyond Algebra 2 with a grade of C- or better;
- Standard Met and four or more years of high school mathematics or quantitative reasoning.


## New SAT Mathematics Test*

- 570 or above;
- 550 or above on Subject Test in Mathematics Level 1 or 2;
- 520-560 and completed 12th grade approved yearlong mathematics course beyond Algebra 2 with a grade of C - or better.
*SAT score conversion for scores prior to March 2016 (old SAT): https:// collegereadiness.collegeboard.org/sat-scoring-beforemarch-2016.


## ACT Mathematics Test

- 23 or above;
- 20-22 and completed 12th grade approved yearlong mathematics course beyond Algebra 2 with a grade of C - or better.
High School Courses and GPA
- Weighted mathematics GPA 3.0 or above and completed 12th grade approved yearlong mathematics course beyond Algebra 2 with a grade of C - or better;
- Weighted mathematics GPA 3.0 or above and five or more years of high school mathematics or quantitative reasoning;
- Weighted high school GPA 3.7 or above;
- Weighted high school GPA 3.5 or above and four or more years of high school mathematics or quantitative reasoning.
Placement in a Supported General Education Subarea B4 Mathematics/Quantitative Reasoning Requirement

The student has met examination standards and/or multiple measures-informed standards via one of the criteria below:
High School GPA

- Weighted mathematics GPA 3.3 or above;
- Weighted high school GPA 3.0 or above.

Placement in a Supported General Education Subarea B4 Mathematics/Quantitative Reasoning Requirement and Participation in the SDSU Freshman Academic Success Track (FAST) Summer Program Required

Based on multiple measures evaluation, student needs additional academic support, including participation in the SDSU Freshman Academic Success Track (FAST) summer program.

## Assessments and Placement for General Education Mathematics/Quantitative Reasoning: Pre-STEM/STEM and Other Mathematics-Intensive Majors

Has Fulfilled the General Education Subarea B4
Mathematics/Quantitative Reasoning Requirement
The student has met the requirement via completion of one of the following:

## Advanced Placement (AP) Test <br> - 3 or above: AP Calculus AB; <br> - 3 or above: AP Calculus BC; <br> - 3 or above: AP Statistics; <br> - 3 or above: AP Computer Science Principles.

International Baccalaureate (IB) Test
. 4 or above on Mathematics Higher Level (HL);

- 4 or above on Computer Science Higher Level (HL).

College Level Examination Program (CLEP)

- 50 or above: Calculus, College Algebra, College Mathematics, or Pre-Calculus.


## College Transfer Coursework

- Completed mathematics/quantitative reasoning college course with a grade of C- or better that satisfies CSU General Education Area B4.

Placement in a General Education Subarea B4
Mathematics/Quantitative Reasoning Requirement
The student has met examination standards and/or multiple measures-informed standards via one of the criteria below:

## CAASPP/EAP Mathematics Examination

- Standard Exceeded;
- Standard Met and completed 12th grade approved yearlong mathematics course beyond Algebra 2 with a grade of C - or better.


## New SAT Mathematics Test*

- 570 or above;
- 550 or above on Subject Test in Mathematics Level 1 or 2;
- 520-560 and completed 12th grade approved yearlong mathematics course beyond Algebra 2 with a grade of C - or better.
*SAT score conversion for scores prior to March 2016 (old SAT): https:// collegereadiness.collegeboard.org/sat-scoring-beforemarch-2016.


## ACT Mathematics Test

- 23 or above;
- 20-22 and completed 12th grade approved yearlong mathematics course beyond Algebra 2 with a grade of C- or better.
High School Courses and GPA
- Weighted mathematics GPA 3.5 or above and completed 12th grade approved yearlong mathematics course beyond Algebra 2 with a grade of C- or better;
- Weighted mathematics GPA 3.5 or above and five or more years of high school mathematics or quantitative reasoning;
- Weighted high school GPA 3.7 or above.

Placement in a Supported General Education Subarea
B4 Mathematics/Quantitative Reasoning Requirement
The student has met examination standards and/or multiple measures-informed standards via the criteria below:
High School Mathematics GPA

- Weighted mathematics GPA 3.3 or above.

Placement in a Supported General Education Subarea B4 Mathematics/Quantitative Reasoning Requirement and Participation in the SDSU Freshman Academic Success Track (FAST) Summer Program Required

Based on multiple measures evaluation, student needs additional academic support, including participation in the SDSU Freshman Academic Success Track (FAST) summer program.
The goal of the Early Start Program (ESP) is to:
Better prepare students in written composition and mathematics/quantitative reasoning before the fall term of freshman year, improving students' chances of successful completion of a baccalaureate degree.

If required to participate in ESP, as determined by multiple measures, students will begin in the summer before the start of the freshman year.

For general information about ESP including fees and course listings, visit csustudentsuccess.org/earlystart. Students are encouraged to visit the campus website for ESP information once admitted.

Eligible financial aid applicants with an Estimated Family Contribution (EFC) of \$5,000 or less will be eligible for waiver of the per unit ESP fee. For more information on assessments, placements and the Early Start Program, please visit http://www.csustudentsuccess.org.

Refer to Rhetoric and Writing Studies for course information.

## Requirements for Registration

San Diego State University students register online through the SDSU WebPortal at http://www.sdsu.edu/portal. The Class Schedule is available at http://www.sdsu.edu/schedule and contains specific information on registration, courses offered for the term, and a listing of the fees required for enrollment. Students will not be permitted to register until fees are paid. Payment of fees by itself does not constitute registration. A student is considered registered when (1) fees have been paid, and (2) at least one course has been added prior to the first day of classes.

Registration Restrictions. The registration system will check for the satisfactory completion of the following tests and requirements: Grammar, Spelling and Punctuation Test (GSP); and Writing Placement Assessment (WPA).

Enrollment in some courses is restricted to students in specific majors and students at specific levels (i.e., freshmen, sophomore, junior, senior, or graduate). Major code and student level restrictions are listed in the Class Schedule footnotes.

The registration system will not allow registration in courses that meet at the same day and time or have overlapping meeting times. The registration system will also not allow enrollment in more than one section of the same course unless it is repeatable.

Students entering SDSU as freshmen are required to complete coursework in composition, mathematics, oral communication, and critical thinking in a specific order. These enrollment requirements are enforced by the registration system. For more information, refer to the Major Academic Plan (MAP) at http://www.sdsu. edu/mymap.

Students enroll in classes each semester during the registration period. The registration period begins on your assigned date and time and ends on the schedule adjustment deadline. Students who have not paid fees or registered for at least one course prior to the first day of classes will be assessed a late registration fee of $\$ 25$. Newly admitted students MAY be exempted from this fee. The deadline to register is on the 10th day from the first day of classes. Summer deadlines will vary by session. Consult the Class Schedule for specific dates.

## Schedule Adjustment

The schedule adjustment period begins when a student first registers on their assigned day and time and runs through the schedule adjustment deadline which is the 10th day of classes at 7:59 p.m. During this period, students are responsible for checking their schedules regularly and for taking the necessary actions to add, drop, or change grading options before the schedule adjustment deadline. Students who do not attend a class and who do not ensure that the course is officially dropped in the SDSU WebPortal at http://www.sdsu.edu/portal, will receive a failing grade. Schedule adjustments are accepted until 7:59 p.m. on the following dates:

Fall 2020 Semester: September 4, 2020
Spring 2021 Semester: February 2, 2021
Students are not permitted to drop or add a class after the stated deadlines, except in cases such as accident or serious illness where the cause of dropping the class is due to circumstances clearly beyond the student's control and the assignment of an Incomplete is not applicable. All such request must be accompanied by appropriate verification. Ordinarily, withdrawals in this category will involve total withdrawal from the university, except that credit or an Incomplete, may be assigned for courses in which sufficient work has been completed to permit an evaluation to be made. Requests to withdraw under such circumstances must be signed by each instructor who indicates your status in the class and approved by the dean (or designee) of the college of the student's major.

Instructor Initiated Drop. Students who do not attend the first class session of a course may be dropped from that course by the instructor within the first eight class days of the semester. Students who do not meet the prerequisite requirements can also be dropped within the first eight class days of the semester. Any student dropped by the instructor during this period will be notified of the action by e-mail. Not all instructors will drop students who miss the first class session or for lack of prerequisites. Students are responsible for all classes on their schedules and should check their schedules regularly to ensure accuracy. It is the student's responsibility to keep a current e-mail address on file through the SDSU WebPortal at http://www.sdsu.edu/portal.

Wait List. Students are able to wait list a class when it has reached capacity. The wait list option is effective when registration begins for each semester. Students will be ranked on the wait list based on specific conditions and first-come, first-serve basis. Students must manage their wait list and ranking throughout the registration period. If a spot becomes available, students will be automatically enrolled to a class on their wait list. An e-mail will be sent to students to confirm enrollment in the wait list class. It is the student's responsibility to keep a current e-mail address on file through the SDSU WebPortal at http://www.sdsu.edu/portal. If you decide that you no longer want that class you have wait listed, you are responsible for removing the class from your wait list.

Improper Registration in Graduate Courses. Only undergraduate students who are completing their bachelor's degree and who have filed a formal request for permission to enroll for concurrent master's degree credit or for concurrent post-baccalaureate credit may be authorized to enroll in 600 and higher-numbered courses. Undergraduate students who have not received permission for concurrent enrollment may not enroll in 600 or higher-numbered courses for any purpose without prior permission of the graduate dean. Undergraduate students who enroll in advanced courses without permission are subject to administrative disenrollment. The registration for graduate students who have not met the stated prerequisites for Course 799A, Thesis, at the time of registration may be canceled.

## Determination of Residency for Tuition Purposes

University requirements for establishing residency for tuition purposes are independent from requirements for establishing residency for other purposes, such as for tax purposes, or other state or institutional residency. These regulations were promulgated not to determine whether a student is a resident or nonresident of California, but rather to determine whether a student should pay university fees at the in-state or out-of-state rate. A resident for tuition purposes is someone who meets the requirements set forth in the Uniform Student Residency Requirements. These laws governing residency for tuition purposes at the California State University are California Education Code sections 68000-68086, 68120-68133, and 89705-89707.5, and California Code of Regulations, Title 5, Subchapter 5, Article 4, sections 41900-41915. This material can be viewed by accessing the CSU website at http:// www.calstate.edu/residency.

The Office of Admissions is responsible for determining the residency status of new and returning students based, as applicable, on the student's Application for Admission, Residency Questionnaire, and, as necessary, other information the student furnishes. A student who fails to provide sufficient information to establish resident status will be classified a nonresident.

Generally, establishing California residency for tuition purposes requires a combination of physical presence and intent to remain indefinitely in the State of California. An adult who, at least 366 days prior to the residency determination date for the term in which resident status is sought, can demonstrate that both physical presence in the state combined with evidence of intent to remain in California indefinitely, may establish California residency for tuition purposes. A student under the age of 19 by the residency determination date derives residency from the parent(s) with whom the student resides or most recently resided. In addition, non-citizens establish residency in the same manner as citizens, unless precluded by the Immigration and Nationality Act from establishing domicile in the United States.

Evidence demonstrating intent to remain in the State of California indefinitely may vary from case to case but will include, and is not necessarily limited to, the absence of residential ties to any other state, California voter registration and history of actually voting in California elections, maintaining California vehicle registration and driver's license, maintaining active California bank accounts, filing California income tax returns and listing a California address on federal tax returns, owning residential property or occupying or renting a residence where permanent belongings are kept, maintaining active memberships in California professional or social organizations, and maintaining a permanent military address and home of record in California.

Exceptions to the general residency requirements are contained in California Education Code sections 68070-68086 and California Code of Regulations, Title 5, Subchapter 5, Article 4, sections 41906-41906.6, 41910. Whether an exception applies to a particular student can only be determined after the submission of an application for admission and, as necessary, additional supporting documentation. Because neither the campus nor the Chancellor's Office staff may give legal advice, applicants are strongly urged to review the material for themselves and consult with a legal adviser.

Residency determination dates are set each term.
Semester Term Campuses
Fall: September 20
Spring: January 25
Summer: June 1
CalState TEACH operates on a trimester system. The residency determination dates for CalState TEACH are as follows:

Fall: September 20
Spring: January 5
Summer: June 1
A student classified as a nonresident for a prior term may seek reclassification in any subsequent term; however, reclassification requires that, in addition to satisfying the requirements of physical presence and intent to remain indefinitely in the state, the student must also satisfy the requirement of financialindependence. A student seeking reclassification is required to complete a Residency Questionnaire that includes questions concerning financial independence. For additional information on intent, physical presence and financial independence requirements, refer to the http:// www.calstate.edu/residency website.

## Residency Appeals

A student classified as a nonresident may appeal a final campus decision within 30 days of notification by the campus. Appeals will be accepted only if at least one of the following criteria applies:

1. The decisions was based on:
a. a significant error of fact by the campus;
b. a significant procedural error by the campus; or
c. an incorrect application of the law which, if corrected would require that the student be reclassified asa California resident; and/or
2. Significant new information, not previously known or available to the student, became available after thedate of the campus decision classifying the student as a nonresident and based on the new information,the classification as a nonresident is incorrect.
Instructions to submit an appeal and additional information can be found at https://www.calstate.edu/residency

Appeals via e-mail, fax, and U.S. mail will not be accepted. A student with a documented disability who is requesting an accommodation to submit appeal through the Calstate website should contact Student Affairs and Enrollment Management.

The Chancellor's Office will either decide the appeal or send the matter back to the campus for further review.

A student incorrectly classified as a resident or incorrectly granted an exception from nonresident tuition is subject to reclassification as a nonresident or withdrawal of the exception and subject to and payment of nonresident tuition in arrears. If incorrect classification results from false or concealed facts, the student may also be subject to discipline pursuant to Section 41301 of Title 5 of the California Code of Regulations. A student previously classified as a resident or previously granted an exception is required to immediately notify the Admissions Office if the student has reason to believe that the student no longer qualifies as a resident or no longer meets the criteria for an exception.

Changes may have been made in the rate of nonresident tuition and in the statutes and regulations governing residency for tuition purposes in California between the time this information is published and the relevant residency determination date. Students are urged to review the statutes and regulations stated above.

## Importance of Filing Complete, Accurate, and Authentic Application Documents

San Diego State University advises prospective students that they must supply complete and accurate information on the application for admission, residency questionnaire, and financial aid forms. Further, applicants must, when requested, submit authentic and recently issued official transcripts (printed within the last year) of all previous academic work attempted. Official transcripts are defined as transcripts that bear the high school or college seal and remain in their original sealed envelope. Failure to file complete, accurate, and authentic application documents by specified deadlines may result in denial of admission, cancellation of registration or academic credit, suspension, or expulsion (Section 41301, Article 1.1, Title 5, California Code of Regulations). This requirement is effective from initial contact with the university and throughout the period the academic record is maintained.

## Use of Social Security Number

Applicants are required to include their correct social security numbers in designated places on applications for admission pursuant to the authority contained in Section 41201, Title 5, California Code of Regulations, and Section 6109 of the Internal Revenue Code (26 U.S.C. 6109). The university uses the social security number to identify students and their records including identification for purposes of financial aid eligibility and disbursement and the repayment of financial aid and other debts payable to the institution. Also, the Internal Revenue Service (IRS) requires the university to file information returns that include the student's social security number and other information such as the amount paid for qualified tuition, related expenses, and interest on educational loans. This information is used by the IRS to help determine whether a student, or a person claiming a student as a dependent, may take a credit or deduction to reduce federal income taxes.

Students and applicants are issued a nine-digit ID number (RedID) for transactions that include accessing the SDSU WebPortal, registering for classes, meal plans, using library services, using Blackboard, communicating with The Center for Human Resources, financial transactions, and all student services.

## CSU Immunization Requirements

Entering CSU students are required to present proof of the following immunizations to the CSU campus they will be attending before the beginning of their first term of enrollment.

Measles, Mumps, and Rubella (MMR). Two (2) doses with first dose on or after 1st birthday; OR positive titer (labratory evidence of immunity to disease).

Hepatitis B (Hep B). All new students who will be 18 years of age or younger at the start of their first term at a CSU campus must provide proof of full immunization against Hepatitis $B$ before enrolling. Full immunization against Hepatitis $B$ consists of three timed doses of vaccine over a minimum 4 to 6 months period. If you need further details, please consult Student Health Services at 619-594-5281 or visit http://shs.sdsu.edu.

Varicella (Chickenpox). Two (2) doses with first dose on or after 1st birthday; OR positive titer (laboratory evidence of immunity to disease) prior to enrollment.

Tetanus, Diphtheria, Pertussis (Tdap). One (1) dose after age 7. Meningococcal conjugate (Serogroups A, C, Y, \& W-135): One (1) dose on or after 16 for all students and age 21 or younger.

Tuberculosis Screening/Risk Assessment. All incoming students must complete a Tuberculosis risk questionnaire. Incoming students who are at higher risk* for TB infection, as indicated by answering "yes" to any of the screening questions, should undergo either skin of blood testing for TB infection within one year of CSU entry.

> *Higher risk include travel or living in Africa, South or Central America, Asia, Eastern Europe, and the MiddleEast; prior positive TB test; or exposure to someone with active TB disease.

The above are not admission requirements, but are required of students as conditions of enrollment in CSU.

For more information about the immunization requirements at SDSU, refer to http://www.sdsu.edu/immunizations.

## Tuition and Fees

The CSU makes every effort to keep student costs to a minimum. Tuition and fees listed in published schedules or student accounts may need to be increased when public funding is inadequate. Therefore, CSU reserves the right, even after tuition or fees are initially charged or initial payments are made, to increase or modify any listed tuition or fees. All listed fees, other than mandatory systemwide tuition, are subject to change without notice, until the date when instruction for a particular semester or quarter has begun. All CSU-listed tuition and fees should be regarded as estimates that are subject to change upon approval by the Board of Trustees, the chancellor, or the presidents, as appropriate. Changes in mandatory systemwide tuition will be made in accordance with the requirements of the Working Families Student Fee Transparency and Accountability Act (Sections 66028 through 66028.6 of the California Education Code).

Students will be liable for amounts that become due as a result of such change.
For updated information regarding the tuition and fees structure for 2020-2021 refer to the online Class Schedule or Student Account Services website at https://bfa.sdsu.edu/financial/student.

Tuition and fees must be paid prior to accessing the WebPortal to register. Payments are accepted for the exact amount of fees. Overpayments of $\$ 10.00$ or less are refunded only upon request. If your payment for tuition and fees is returned by the bank for any reason, your registration may be canceled and you will be billed $\$ 55.00$ (a dishonored payment charge of $\$ 35.00$ and late fee of $\$ 20.00$ ). Payment of tuition and fees should be made online or by check or money order. The university reserves the right to refuse payment by personal check or eCheck from those individuals who have previously had items returned unpaid by their bank. Refunds may be applied against other amounts due to the university.

You may pay your fees online using your checking account information (eCheck). There is no additional fee assessed for this service. Visit the Student Account Services website at https:// bfa.sdsu.edu/financial/student and see Online Student Account Services.

In cooperation with SDSU, CASHNet ${ }^{m}$ SmartPay allows students to pay their tuition and fees and/or out-of-state tuition with American Express, Discover Card, MasterCard, or VISA. CASHNet"'SmartPay is accessed directly from your online student account. Visit the Student Account Services website at https:// bfa.sdsu.edu/financial/student and see Online Student Account Services.

Payments made via CASHNet"'SmartPay are received by Student Account Services no later than the next business day, so the registration process is not delayed. CASHNet" ${ }^{\prime \prime}$ SmartPay assesses each customer a service charge based on the transaction amount. See the website for details.

## Administrative / Financial Holds

All administrative and financial holds must be cleared prior to submittal of payment for registration or other university services. See "Fees and Debts Owed to the Institution" in this section of the catalog. Acceptance of payment by the university does not constitute completion of registration or guarantee of services if any kind of administrative or financial hold exists.

Depending on the situation, you may be required to clear your hold with cash, money order, or certified check.

## Basic Tuition Fees - All Students

(On basis of units carried.)
The following reflects applicable systemwide tuition and fees fees. These rates are subject to change. Fee payment information and instructions are in Money Matters available at https:// bfa.sdsu.edu/financial/student.

Auditors pay same fees as students carrying courses for credit. Nonresident (foreign and out-of-state) students pay additional fees-see information below. Thesis extension, other zero unit courses, and half unit courses are charged as one unit for fee purposes.

## BASIC TUITION AND FEES

FALL 2020 / SPRING 2021, Per Semester Units Attempted

Basic Tuition and Fees UNDERGRADUATE


Tuition and fees above include a Student Body Association Fee of $\$ 35.00$, a Student Body Center Fee of $\$ 237.00$, a Health Facilities Fee of $\$ 25.00$, an Instructionally Related Activities Fee of $\$ 244.00$, a Student Health and Wellness Fee of \$205.00, a Library Use Fee of $\$ 25.00$, a Student Success Fee of $\$ 218.00$, and a Basic Tuition Fee of either $\$ 1,665.00$ or $\$ 2,871.00$ for undergraduate students, $\$ 2,082.00$ or $\$ 3,588.00$ for graduate students, $\$ 1,932.00$ or $\$ 3,330.00$ for teaching credential candidates, or $\$ 5,919.00$ for education doctoral students, or $\$ 8,598.00$ for physical therapy doctoral students, depending on unit load.
SDSU Imperial Valley students pay a Student Body Association Fee of $\$ 65.00$, a Student Body Center Fee of $\$ 24.00$, a Health Facilities Fee of $\$ 3.00$, a Health Services Fee of $\$ 10.00$, and an Instructionally Related Activities Fee of $\$ 15.00$. SDSU Imperial Valley students do not pay the Library Use Fee. See SDSU Imperial Valley Bulletin for details.

The total fee paid per term will be determined by the number of units taken.
Mandatory systemwide fees are waived for those individuals who qualify for such exemption under the provisions of the California Education Code. See "Fee Waivers and Exemptions" in this section of the catalog.
Students are charged campus fees in addition to tuition fees and other systemwide fees.

Optional Fees: The CSU Board of Trustees adopted the Student Involvement and Representation Fee (SIRF), establishing a stable funding model for the California State Student Association (CSSA). The new funding model expands independence and builds capacity to engage students in advocacy and policy making. The funding model consists of a $\$ 2$ per-term fee assessed to each CSU student, on a voluntary basis, allowing the choice to opt-out each semester.

## Graduate Business Professional Program Fee

Graduate students in the Fowler College of Business must pay an additional $\$ 270.00$ per unit for all units taken as a requirement for graduation for the following degrees. This fee is in addition to basic tuition and fees and nonresident tuition.

- MBA Master of Business Administration
-MS Accountancy
- MS Business Administration
- MS Information Systems

A fee waiver is available for courses that are not used to meet degree requirements (excluding prerequisite courses). Contact the Graduate Business Programs Office, Education and Business Administration, Room 448, for details.

## Tuition For Nonresident Students

## (Foreign and Out-of-State)

Nonresident tuition is paid in addition to basic tuition and fees and other systemwide fees charged to all students. Tuition will be charged for all units attempted. The total nonresident tuition paid per term will be determined by the number of units taken. Per unit.
$\$ 396.00$
(Mandatory systemwide fees are waived for those individuals who qualify for such exemption under the provisions of the California Education Code. For fee-paying purposes, zero unit and half-unit courses are counted as one unit. See Liability for Payment section for additional important information.)
Health insurance (mandatory for foreign students)
Per year, approximately.
\$1,282.00

## Cost of Living

San Diego State University establishes standard student budgets in coordination with the California State University system that meet federal requirements. Student budgets, updated annually to account for inflation are currently:

## Costs of Attendance for the 2020-2021 Academic Year

|  | Living off campus | Living on campus | Commuting from home |
| :---: | :---: | :---: | :---: |
| Basic tuition and fees. | \$7,720 | \$7,720 | \$7,720 |
| Books and supplies.. | \$1,079 | \$1,079 | \$1,079 |
| Food and housing | \$13,860 | \$18,531 | \$7,627 |
| Transportation. | \$1,070 | \$1,121 | \$1,716 |
| Miscellaneous/personal ....... | \$2,445 | \$1,789 | \$2,270 |
| Total... | \$26,174 | \$30,240 | \$20,41 |

The academic year basic tuition and fees for teacher credential students are $\$ 8,638$. Basic tuition and fees are $\$ 9,154$ for post-baccalaureate students, $\$ 13,816$ for education doctoral (Ed.D.) students, and $\$ 19,174$ for physical therapy doctoral students. Business students in selected degree programs pay an additional $\$ 270$ per unit (refer to the Graduate Business Professional Program Fee information). Nonresident tuition is an additional \$396 per unit.

## Parking Fees

Student commuter semester parking permit................................. \$174.00 Motorcycle/moped semester parking permit .............................. \$37.00
Combined student/overnight semester parking permit........... \$276.00
Section 42201 of Title 5, California Code of Regulations, provides for the waiver of campus parking fees for students with disabilities who have been issued a DMV placard or license plate, and who meet low income requirements. For further information regarding eligibility, contact the Student Ability Success Center, Calpulli Center, Room 3101. Additional parking information is available: http://bfa.sdsu.edu/campus/parkingtrans/permits.aspx.

| Miscellaneous Fees <br> (Fees payable when service is rendered.) |  |
| :---: | :---: |
| Administrative citation fee | \$75.00 |
| Application for admission or readmission (nonrefundable) | \$70.00 |
| Athletic cheer team membership fee (fee range based on planned competitions |  |
| Athletic winter guard membership fee (fee range based on yearly travel plans) | \$1,500 |
| Counseling Diversion Program fee | 100.00 |
| Counseling Diversion Program fee (missed appointment) | \$30.00 |
| Credential application fee* | \$55.00 |
| Credential evaluation fee. | \$25.00 |
| Credit by examination fee | \$100.00 |
| Diploma replacement fee | \$12.00 |
| Document copying fee (per page) | \$1.00 |
| Enrollment confirmation deposit (nonrefundable) | \$400.00 |
| Graduation services fee | \$100.00 |
| Interest inventory assessment | \$10.00 |
| Internet reconnect fee (wired/wireless). | \$150.00 |
| Late course forgiveness fee | \$20.00 |
| Late fee (failure to meet administratively required appointment or time limit) $\qquad$ | \$20.00 |
| Late key fee | \$30.00 |
| Late registration (nonrefundable) | \$25.00 |
| Latin diploma fee | \$22.00 |
| Lock and locker fee (optional) | \$1.00 |
| Loss of or damage to library materials |  |
| Replacement cost plus service charge. | \$8.00 |
| Lost key fee (per key) <br> (Late fee also charged when applicable) | \$50.00 |
| Musical instrument and audio/visual equipment fee. | \$20.00 |
| Photo-identification card (one-time cost to new undergraduate and graduate students at time of registration (nonrefundable) | \$18.00 |
| Photo-identification card replacement fee. | \$20.00 |
| Police report fee.. | \$10.00 |
| Registration installment plan service charge (nonrefundable) | \$60.00 |
| Resident affiliate program (RAP) fee | \$25.00 |
| Returned payment fee** | \$35.00 |
| Teacher Education Credential Application processing/advising fee. | \$25.00 |
| Tow fee.. | \$150.00 |
| Towel fee (optional), | \$4.00 |
| Transcript of record, official (per transcript). | \$10.00 |
| Official Transcript of Record, On-Demand (per transcript) ( $\$ 25.00$ for first transcript and $\$ 10.00$ for each additional on-demand transcript printed at the same time.). |  |
| Tuition (Foreign and Out-of-State) installment plan initial payment of $\$ 2,376$ ( 6 units) and service charge. Equal to | 15\% |

(of each installment payment)
Vehicle immobilization fee
\$150.00

[^0]
## Miscellaneous Instructional Course Charges

Optional and mandatory course charges are assessed for a number of courses and laboratories offered at SDSU.

A list of the courses and fee amounts can be found at https:// bfa.sdsu.edu/financial/student under Money Matters. The courses are also footnoted in the Class Schedule.

## Installment Plan

Basic Tuition and Fees. An installment plan is available for students who wish to pay their basic tuition and fees in payments. There is a $\$ 60.00$ service charge for this service, paid at the time the initial payment is made. Additional information and instructions are available in the Money Matters section of the Student Account Services website.

Tuition (Foreign and Out-of-State). An installment plan is available for students who wish to pay their tuition in payments. There is a minimum payment of $\$ 2,376$ and a $15 \%$ service charge applied to each installment payment. Additional information and instructions are available on the Student Account Services website at https://bfa.sdsu.edu/financial/student.

## Credit Cards

Student Account Services/Cashiers does not accept credit cards for payment of tuition and fees except as applicable under the terms of the Installment Plan. Visa and MasterCard debit cards may be used for payment of student fees. American Express, MasterCard, Visa, and Discover Card charge cards are accepted for other payments, such as housing, parking, health services, continuing education, installment payments, and miscellaneous over-the-counter payments. In cooperation with SDSU, CASHNet ${ }^{\text {tw }}$ SmartPay does afford students the choice to use a credit card (American Express, MasterCard, Discover Card and Diners Club Card) to pay tuition and fees. Refer to fees section on previous page. Most ATM cards are also accepted for payment of miscellaneous charges. Payment of student tuition and fees may be subject to a non-refundable credit card processing fee. Additional information is available from Student Account Services.

## Liability for Payment

Whether or not an invoice is received from the university, students are liable for payment of all tuition and fees related to units held on or added after the close of business on the 12th day following the commencement of instruction. Foreign and out-ofstate students are also liable for tuition related to all units held on or added after the close of business on the 12th day following the commencement of instruction.

All continuing students participating in online registration must make tuition and fee payments by the deadline as instructed.

Nonresident (foreign and out-of-state) tuition must be paid prior to the first day of classes. Nonresident and foreign students must pay or sign up for the Tuition Installment Plan for a minimum of 12 units ( 9 units graduate) at the time of registration. Undergraduate foreign students wishing to pay fewer than 12 units and graduate students wishing to pay fewer than nine units must submit an approved Application for Reduced Course Load available through the International Student Center.

IT IS THE STUDENT'S RESPONSIBILITY TO BE AWARE OF TOTAL TUITION AND FEES DUE. Additional fees that may become due as a result of units added during the semester must be paid at Student Account Services/Cashiers at the time the units are added. Note fee schedule above. LATE PAYMENTS FOR TUITION AND FEES ARE SUBJECT TO AN ADDITIONAL LATE FEE AND APPLICABLE SERVICE CHARGES.

## Dishonored Check

If your check (either paper or electronic) is returned or not accepted by the bank for ANY REASON, you will be billed for the $\$ 35.00$ dishonored payment charge and the $\$ 20.00$ late fee when applicable. Nonpayment of tuition or fees may result in cancellation of your registration and withholding of further services until all financial liabilities have been resolved.

The university reserves the right to refuse payment by personal check, eCheck, or credit card from those individuals who have previously had items returned unpaid by their bank.

## Refund of Tuition and Mandatory Fees, Including Nonresident Tuition

Regulations governing the refund of tuition and mandatory fees, including nonresident tuition, for students enrolling at the California State University are included in Section 41802 of Title 5, California Code of Regulations. For purposes of the refund policy, mandatory fees are defined as those systemwide and campus fees that are required to be paid in order to enroll in state-supported academic programs at the CSU. Refunds of fees and tuition charges for self-support, special session, and extended education programs or courses at the CSU are governed by a separate policy established by the university, available at https:// bfa.sdsu.edu/financial/student.

In order to receive a full refund of tuition and mandatory fees, less an administrative charge established by the campus, including nonresident tuition, a student must cancel registration or drop all courses prior to the first day of instruction for the term. Information on procedures and deadlines for canceling registration and dropping classes is available at https://registrar.sdsu.edu/.

For state-supported semesters, quarters, and non-standard terms or courses of four weeks or more, a student who withdraws during the term in accordance with the university's established procedures or drops all courses prior to the campus-designated drop period will receive a refund of tuition and mandatory fees, including nonresident tuition, based on the portion of the term during which the student was enrolled. No student withdrawing after the 60 percent point in the term will be entitled to a refund of any mandatory fees or nonresident tuition.

A student who, within the campus designated drop period and in accordance with campus procedures, drops units resulting in a lower tuition and/or mandatory fee obligation shall be entitled to a refund of applicable tuition and mandatory fees less an administrative charge established by the campus.

For state-supported non-standard terms or courses of less than four weeks, no refunds of tuition and mandatory fees, including nonresident tuition, will be made unless a student cancels registration or drops all classes in accordance with the university's established procedures and deadlines, prior to the first day of instruction for state-supported non-standard terms or courses or prior to the first meeting for courses of less than four weeks.

Students will also receive a refund of tuition and mandatory fees, including nonresident tuition, under the following circumstances:

- The tuition and fees were assessed or collected in error;
- The course for which the tuition and fees were assessed or collected was cancelled by the university;
- The university makes a delayed decision that the student was not eligible to enroll in the term for which tuition and mandatory fees were assessed and collected and the delayed decision was not due to incomplete or inaccurate information provided by the student; or
- The student was activated for compulsory military service.

Students who are not entitled to a refund as described above may petition the university for a refund demonstrating exceptional circumstances and the chief financial officer of the university or designee may authorize a refund if he or she determines that the fees and tuition were not earned by the university.

Information concerning any aspect of the refund of fees may be obtained from Student Account Services. Refunds may be applied against other amounts due to the university.

## Return to Title IV Financial Aid Requirements

The following policy is required by the Higher Education Amendments of 1998 (Public Law 105-244, enacted October 7, 1998).

When a student who has received Title IV financial aid withdraws, or otherwise fails to complete a period of enrollment for which he or she was charged, the institution is required to determine if unearned aid must be returned to the federal accounts. Calculations will be based on the withdrawal date and the percentage of the period of enrollment completed. If Title IV funds have been disbursed during the enrollment period, aid will first be returned by the institution to the programs in the order listed below as required by law and determined by the university. If
funds have been disbursed directly to the student, he or she may be required to repay any unearned aid. In some cases where eligibility for aid exceeds the amount disbursed, the regulations allow for a post-withdrawal disbursement. If eligible for a post-withdrawal disbursement, the university will notify you of the process required to receive the funds.

Title IV Financial Aid consists of the following programs:

- Unsubsidized William D. Ford Federal Direct Loan
- Subsidized William D. Ford Direct Loan
- William D. Ford Federal Direct PLUS Loan
- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant (FSEOG)
- Federal Teach Grant

Examples of refund calculations are available upon request at Student Account Services.

A school must return unearned funds for which it is responsible as soon as possible but no later than 45 days from the determination of a student's withdrawal.

## Refund of Parking Fees

Refunds are not automatic. This schedule of refunds refers to calendar days, commencing on the date of the term when instruction begins. Percentage for fall and spring semester permits:
Period
Amount of Refund
First week of class ......................................................... 100 percent of fee
Second and third week
.75 percent of fee
Fourth week through end of sixth week ..................... 50 percent of fee
Seventh week through tenth week.... 25 percent of fee
Eleventh week through end of term $\qquad$
Your parking permit must be turned in to Parking and Transportation Services at the time you file your refund application. The amount of refund is rounded down to the nearest dollar. No refund is made for amounts of $\$ 5.00$ or less. Refunds may be applied against other amounts due to the university.

## Late Registration Fee

The Late Registration fee (\$25) pertains to those students who have not paid fees or registered for at least one course prior to the first day of classes. Newly admitted students MAY be exempted from this fee. The registration process is not complete until all fees due are paid and you are officially enrolled in classes through the Office of the Registrar.

## Cancellation of Registration or Withdrawal <br> from the University

Students who find it necessary to cancel their registration or to withdraw from all classes after enrolling for any academic term are required to follow the university's official withdrawal procedures. Failure to follow formal university procedures may result in an obligation to pay fees as well as the assignment of failing grades in all courses and the need to apply for readmission before being permitted to enroll in another academic term. Information on canceling registration and withdrawal procedures is available from the Office of the Registrar.

Students who receive financial aid funds must consult with the Office of Financial Aid and Scholarships prior to withdrawing from the university. Students who have received financial aid and withdraw from the institution during the academic term or payment period may need to return or repay some or all of the funds received, which may result in a debt owed to the institution.

## Appeals Process - Student Account Services

An appeals process exists for students who believe that individual circumstances warrant exceptions from published policy. Students should file a "Petition for Special Consideration" obtainable at Student Account Services. Petitions must be filed with Student Account Services prior to the end of the 12th week of classes.

Petitions for refunds outside the scope of published policy are approved only when applicants can demonstrate exceptional circumstances, and the chief financial officer or designee determines that the tuition and fees were not earned by the university.

## Summer Session Fees

Refer to SDSU Summer Session Class Schedule for schedule of fees.

## SDSU Global Campus Course Fees

Refer to SDSU Global Campus Catalog for schedule of fees.

## Exemptions

Students receiving vocational rehabilitation benefits (U.S. Code, Title 38, Chapter 31) or the eligible dependents of veterans with service-connected disability or death (California Education Code, Section 32320) will have eligible tuition and fees paid or waived under provisions of these respective programs. See Class Schedule for instructions regarding deadlines for submission of documents to Student Account Services/Cashiers.

Those students who are eligible dependents of veterans with service-connected disability or death (California Education Code, Section 32320) must apply to the Regional Office of the Department of Veterans Affairs for the fee waiver in the year they apply to SDSU and all subsequent years they attend. Fee waiver (and refund of fees paid) will be approved for a prior academic year only if an application for certification of disabled status is pending with the United States Department of Veterans Affairs.

Further information regarding these programs is available in the Joan and Art Barron Veterans Center located in Student Services West. Call 619-594-5813 or visit http://www.sdsu.edu/ veterans.

## Fee Waivers and Exemptions

The California Education Code provides for the waiver of mandatory systemwide tuition fees as follows:

Section 66025.3 - Military: Dependent eligible to receive assistance under Article 2 of Chapter 4 of Division 4 of the Military and Veterans Code; child of any veteran of the United States military who has a service-connected disability, has been killed in service, or has died of a service-connected disability, and meets specified income provisions; dependent, or surviving spouse who has not remarried, of any member of the California National Guard who, in the line of duty, and while in the active service of the state, was killed, died of a disability resulting from an event that occurred while in the active service of the state, or is permanently disabled as a result of an event that occurred while in the active service of the state; and any undergraduate student who is a recipient of a Medal of Honor, or undergraduate student who is a child of a recipient of a Medal of Honor who is no more than 27 years old, who meets the income restriction and California residency requirement. The waiver of tuition or fees under this section applies only to a person who is determined to be a resident of California pursuant to Chapter 1 (commencing with Section 68000) of Part 41.

Foster Youth: Current or former foster youth who are 25 years of age or younger; have been in foster care for at least 12 consecutive months after reaching 10 years of age; meet one of the following: is under a current foster care placement order by the juvenile court, was under a foster care placement order by the juvenile court upon reaching 18 years of age, or was adopted, or entered guardianship, from foster care; completes and submits the Free Application for Federal Student Aid (FAFSA); maintains a minimum grade point average and meets the conditions necessary to be in good standing at the campus; and meets the financial need requirements established for Cal Grant A awards. The waiver of mandatory systemwide tuition and fees under this section applies only to a person who is determined to be a resident of California pursuant to Chapter 1 (commencing with Section 68000) of Part 41 of the California Education Code.

Section 66602 - A qualifying student from the California State University who is appointed by the Governor to serve as Trustee of the California State University for the duration of his or her term of office.

Section 68120 - Surviving spouse or child of a deceased California resident who was employed by a public agency, or was a contractor or an employee of a contractor, performing services for a public agency, and was killed or died as a result of an industrial injury or illness arising out of and in the course of the performance of his/her principal duties of active law enforcement or fire
suppression duties (referred to as Alan Pattee Scholarships). Additionally a person who qualifies for the waiver under this section as a surviving child of a contractor or of an employee of a contractor, who performed services for a public agency, must have enrolled as an undergraduate student at the California State University and meet the applicable income restriction requirement with supporting documentation (i.e. his/her income, including the value of parent support, does not exceed the maximum household income and asset level for an applicant for a Cal Grant B award).

Section 68121 - A qualifying student enrolled in an undergraduate program who is the surviving dependent of any individual killed in the September 11, 2001, terrorist attacks on the World Trade Center in New York City, the Pentagon building in Washington, D.C., or the crash of United Airlines Flight 93 in southwestern Pennsylvania, if the student meets the financial need requirements set forth in California Code Section 69432.7 for the Cal Grant A Program and either the surviving dependent or the individual killed in the attacks was a resident of California on September 11, 2001.

Section 69000 - A person who has been exonerated, as that term is defined in Section 3007.05(e) of the Penal Code; completes and submits the FAFSA; and meets the financial need requirements established for Cal Grant A awards. The waiver of mandatory systemwide tuition and fees under this section applies only to a person who is determined to be a resident of California pursuant to Chapter 1 (commencing with Section 68000) of Part 41 of the California Education Code.

The California Education Code provides for the following nonresident tuition exemptions:

Section 68075 - A student who is a member of the Armed Forces of the United States stationed in this state, except a member of the Armed Forces assigned for educational purposes to a state-supported institution of higher education, is entitled to resident classification only for the purpose of determining the amount of tuition and fees.

If that member of the Armed Forces of the United States who is in attendance at an institution is thereafter transferred on military orders to a place outside this state where the member continues to serve in the Armed Forces of the United States, he or she shall not lose his or her resident classification so long as he or she remains continuously enrolled at that institution.

Section 68075.7 - A nonresident student is exempt from paying nonresident tuition or any other fee that is exclusively applicable to nonresident students if the student (1) resides in California, (2) meets the definition of "covered individual" as defined in either (A) Section 3679(c)(2)(A) or (B)(ii)(I) of Title 38 of the United States Code, as that provision read on January 1, 2017; or (B) Section 3679(c)(2)(B) (i) or (ii)(II) of Title 38 of the United States Code, as that provision read on January 1, 2017; and (3) is eligible for education benefits under either the federal Montgomery GI Bill-Active Duty program ( 30 U.S.C. § 3001 et seq.) or the Post-9/11 GI Bill program (38 U.S.C. § 3301 et seq.) as each read on January 1, 2017.

Section 68122 - A student who is a victim of trafficking, domestic violence, and other serious crimes who has been granted T or U visa status (respectively under Section 1101(a)(15)(T)(i) or (ii), or Section 1101(a)(15)(U)(i) or (ii), of Title 8 of the United States Code) shall be exempt from paying nonresident tuition to the same extent as individuals who are admitted to the United States as refugees under Section 1157 of Title 8 of the United States Code.

Section 68130.5 - A student, other than a nonimmigrant alien (8 U.S.C. § 1101(a)(15)), who is not a resident of California is exempt from paying nonresident tuition if the student meets the requirements of 1 through 4 below:

1. Satisfaction of the requirements of $A$ or $B$.
A. A total attendance of, or attainment of credits earned while in California equivalent to, three or more years of full-time attendance or attainment of credits at any of the following:
i. California high schools;
ii. California high schools established by the State Board of Education;
iii. California adult schools established by a county office of education, a unified school district or high school district, or the Department of Corrections and Rehabilitation (subject to the class hours' requirement);
iv. Campuses of the California Community Colleges (subject to the credit requirements);
v. A combination of those schools set forth in clauses $i$ to iv, inclusive.
B. Three or more years of full-time high school coursework, and a total of three or more years of attendance in California elementary schools, California secondary schools, or a combination of California elementary and secondary schools.
2. Satisfaction of any of the following:
A. Graduation from a California high school or attainment of the equivalent thereof;
B. Attainment of an associate degree from a campus of the California Community Colleges;
C. Fulfillment of the minimum transfer requirements established for the California State University for students transferring from a campus of the California Community Colleges.
3. Registration as an entering student at, or current enrollment at, an accredited institution of higher education in California not earlier than the fall semester or quarter of the 2001-2002 academic year.
4. In the case of a person without lawful immigration status, the filing of an affidavit with the institution of higher education stating that the student has filed an application to legalize his or her immigration status, or will file an application as soon as he or she is eligible to do so.
Students who may qualify for these benefits should contact the Office of the Registrar for further information and/or an eligibility determination.

## Over 60 Fee Waiver Program

San Diego State University offers a fee waiver program for California residents 60 years of age and older. Both undergraduate and post-baccalaureate students may participate in the program. The program waives the admission application fee and regular registration fees (except for a nominal fee). Participants must apply for admission during the regular application filing period and be admitted under regular admission requirements. Participants register for classes on a space-available basis after regularly matriculated students have completed registration. For additional information, contact the Office of Admissions.

## Procedure for the Establishment or Abolishment of Campus-Based Mandatory Fees

The law governing the California State University provides that specific campus fees defined as mandatory, such as a student body association fee and a student body center fee may be established. A student body association fee must be established upon a favorable vote of two-thirds of the students voting in an election held for this purpose (California Education Code, Section 89300). The university president may adjust the student body association fee only after the fee adjustment has been approved by a majority of students voting in a referendum established for that purpose. The required fee shall be subject to referendum at any time upon the presentation of a petition to the university president containing the signatures of 10 percent of the regularly enrolled students at the university. Student body association fees support a variety of cultural and recreational programs, childcare centers, and special student support programs. A student body center fee may be established only after a fee referendum is held which approves by a two-thirds favorable vote the establishment of the fee (California Education Code, Section 89304). Once bonds are issued, authority to set and adjust student body center fees is governed by provisions of the State University Revenue Bond Act of 1947, including, but not limited to, California Education Code sections 90012, 90027, and 90068.

The process to establish and adjust other campus-based mandatory fees requires consideration by the campus fee advisory committee and a student referendum as established by California State University Student Fee Policy (Executive Order 1102), Section III. The university president may use alternate consultation mechanisms if he/she determines that a referendum is not the best mechanism to achieve appropriate and meaningful consultation. Results of the referendum and the fee committee review are advisory to the university president. The president may adjust campus-based mandatory fees, but must request the chancellor to establish a new mandatory fee. The president shall provide to the campus fee advisory committee a report of all campus-based mandatory fees. The campus shall report annually to the chancellor a complete inventory of all campus-based mandatory fees.

For more information or questions, contact the Budget Office in the CSU Chancellor's Office at 562-951-4560.

## Fees and Debts Owed to the Institution

Should a student or former student fail to pay a fee or a debt owed to the institution, including tuition and student charges, the institution may "withhold permission to register, to use facilities for which a fee is authorized to be charged, to receive services, materials, food or merchandise, or any combination of the above from any person owing a debt" until the debt is paid (see Title 5, California Code of Regulations, Sections 42380 and 42381).

Prospective students who register for courses offered by the university are obligated for the payment of charges and fees associated with registration for those courses. Failure to cancel registration in any course for an academic term prior to the first day of the academic term gives rise to an obligation to pay student charges and fees including any tuition for the reservation of space in the course.

The institution may withhold permission to register or to receive other services offered by the institution from anyone owing fees or another debt to the institution. The institution may also report the debt to a credit bureau, offset the amount due against any future state tax refunds due to the student, refer the debt to an outside collection agency and/or charge the student actual and reasonable collection costs, including reasonable attorney fees if litigation is necessary, in collecting any amount not paid when due.

The institution may not withhold an official transcript of grades by the institution from anyone owing fees or another debt to the institution (see Title 1.6C.7 (commencing with Section 1788.90) Part 4 of Division 3 of the Civil Code). The institution can still charge a fee for the issuance of the transcript pursuant to their published transcript processing fees.

If a person believes he or she does not owe all or part of an asserted unpaid obligation, that person may contact Student Account Services. Student Account Services, or another office on campus to which Student Account Services may refer the person, will review all pertinent information provided by the person and available to the campus and will advise the person of its conclusions.

## Financial Aid and Scholarships

## Financial Aid

Student financial aid programs are intended to provide assistance to students who do not have the necessary financial resources to meet their educational costs. Most students qualify for some type of assistance. Only United States citizens and eligible noncitizens can receive federal financial aid. For resources that recognize academic achievement, refer to the following information on scholarships.

Information about all state, federal, and institutional aid programs is available from the Office of Financial Aid and Scholarships, Student Services West, Room 3615, 619-594-6323. Information about the available programs as well as the academic standards that a student must maintain to remain eligible for such aid can be accessed at http://www.sdsu.edu/financialaid.

## Applying for Aid

Applicants who want to be considered for all types of state and federal financial aid should apply as soon after October 1 as possible by completing a Free Application for Federal Student Aid (FAFSA). For California Dream Act-eligible students, complete the California Dream Act application to be considered for state grants.

The FAFSA is all you need to begin the application process. You may apply by using FAFSA on the Web at http://www.fafsa.ed.gov. For California Dream Act-eligible students, complete the California Dream Act application at https://dream.csac.ca.gov/.

To be considered for a financial aid registration fee postponement, a student must complete the FAFSA or California Dream Act application and submit all requested documents by December 1. Applications and documents submitted after December 1 may not be processed in time to be considered for a registration fee postponement.

## Refund Policy

Information concerning the refund policy of San Diego State University for the return of unearned tuition and fees or other refundable portions of institutional charges is available from the Student Account Services, Student Services West, Room 2536, 619-594-5253.

Information concerning San Diego State University policies regarding the return of unearned aid to the federal Title IV student assistance programs is available from the Office of Financial Aid and Scholarships, Student Services West, Room 3615, 619-594-6323.

## Financial Aid Portal: AidLink

The SDSU Office of Financial Aid and Scholarships uses AidLink, an online financial aid information system, as the main mode of communication with students. Students log in to AidLink at http://www. sdsu.edu/financialaid using their SDSUid or Red ID and password. Through AidLink, students can access financial aid award information, activate loans, identify holds, view requests for documentation, and more. If students have additional questions about financial aid, counselors are available by phone or on a walk-in basis at the Office of Financial Aid and Scholarships.

## Scholarships

San Diego State University awards scholarships to students to recognize and encourage individual talents, academic achievement, leadership skills, and the determination to succeed in spite of significant hardships. Scholarships are also awarded to students to support participation in SDSU approved study abroad programs, community service programs, and faculty approved conference attendance that is part of a student's SDSU curriculum. All students, regardless of grade point average, area of study, citizenship, or residency status are encouraged to apply for SDSU scholarships.

The Office of Financial Aid and Scholarships coordinates the SDSU scholarship application and awarding process with the committees from the various departments and organizations responsible for selecting recipients. Scholarship funds are provided by private donors, corporations, professional associations, and SDSU alumni. In addition to SDSU scholarships, the Marshall, Fulbright, Rhodes, and Rotary Scholarships are prestigious international scholarships that are given annually to students pursuing educational goals outside the United States. To apply for scholarships, visit the Office of Financial Aid and Scholarships website at http://www.sdsu.edu/ financialaid.

## Other Scholarship Resources and Links <br> The Office of Financial Aid and Scholarships website also lists

 resources and links to outside scholarship information and free scholarship search websites.
## Fellowships Administered by Departments

Students may receive fellowships or traineeships through the various departments on campus. Federal, state, and private industry programs of this nature are largely directed to students pursuing graduate studies or to students preparing for a specialized occupation. Students who have decided on a particular area of study should check with an adviser in the department of their major to determine what fellowship support might be available to them.

## Division of Student Affairs

## OFFICE: Student Services West 2640

TELEPHONE: 619-594-5211 / FAX: 619-594-7089

## Administration

Vice President for Student Affairs: Christy Samarkos (Interim) Associate Vice Presidents for Student Affairs: Andrea Dooley, Antionette Jones Marbray, Rashmi C. Praba

## Assistant Vice President for Campus Life

and Dean of Students: Randall W.M. Timm

## General Information

The Division of Student Affairs is a student-centered partner in the SDSU learning community. Education is enhanced, both inside and outside of the classroom, through high-impact programs, and services that advance student learning, development, and success.

The division facilitates the academic success, personal growth, and well-being of all students. Student Affairs transitions and connects students to the university and to their future, building communities that foster progress toward degree completion, and lifelong Aztec affinity.

The Division of Student Affairs consists of:

- Assessment and Research
- Career Services
- Compact for Success and Collaborative Programs
- Counseling \& Psychological Services
- Dean of Students
-Educational Opportunity Programs and Ethnic Affairs (EOP)
- Financial Aid and Scholarships
- International Student Center/SDSU Study Abroad
- New Student and Parent Programs
- Office of the Student Ombudsman
- Residential Education
- Student Ability Success Center
- Student Health Services
- Student Life \& Leadership
- Student Rights and Responsibilities
- Testing Services
-Well-being and Health Promotion


## Career Services

Student Services East, Room 1200
619-594-6851
http://career.sdsu.edu
Career Services supports student success by serving as the central campus resource for career development, planning, and advising. The center works with on-campus and community partners to ensure that SDSU students build the relevant skills, experiences, and effective connections they need to achieve their career goals.

## Career Development and Guidance

Career counselors, career peers, and employers support students with essentials for success that include choosing a major, locating and applying for internships, connecting to mentors, finding summer jobs, and securing full-time employment. The career center's partners participate in programming and services that help students with decision-making, resume development writing, networking at career fairs, researching careers, employment job interviewing, effectiveness on social media, participating in faculty-led research, and preparing for graduate school.

## Aztec Career Connection

Career Services provides SDSU students with Aztec Career Connection, the SDSU online portal for internships, research opportunities, and full-time employment. Aztec Career Connection can be found by visiting the Career Services homepage at http://career.sdsu.edu. This resource provides students with
event information and advance registration for workshops and events. Aztec Career Connection also provides free access to the following resources:

- TypeFocus - career assessment and planning;
- BigInterview - mock interviewing;
- Going Global - a resource for working abroad;
- On-Campus Interviews - interview with employers via semes-ter-based program.
Students have access via their SDSUid credentials to Aztec Career Connection as soon as they register for classes. Visit http://career.sdsu.edu for instructions on accessing Aztec Career Connection.


## Internships, Mentorships, Experiential Service Learning, and Employment Opportunities

Career Services serves as the central campus resource for internships and mentorships. The center partners with academic departments, employers, and alumni to provide information about for-credit and other internship opportunities. Each semester, Career Services also offers a series of internship workshops and partners with the Office of Alumni Engagement to provide mentorship opportunities via the Aztec Mentor Program (AMP). AMP matches students with alumni and other professionals to strengthen career exploration, job readiness, and professional networking. The career center also works with campus and community partners to provide resources to support student engagement with experiential learning and information about student-to-student mentoring opportunities. Additionally, Career Services manages a centralized resource to apply and interview for full-time jobs, and internships via on-campus interviewing. The center hosts employer information sessions, networking events, and professional workshops where students can learn about an array of industries and occupations while interacting directly with recruiters. The center also offers signature programming for current topics such as the annual Diversity Career Conference, security clearance symposium, industry mock interviews, excursions to San Diego and other regions of the state, and emerging industry panels.

## Career Fairs and On-Campus Interviews

Career Services provides all-major, two-day career fairs in September and February. The center also works with colleges to provide industry-focused career fairs that include business, education, engineering/STEM, government, and non-profit disciplines. Consult Aztec Career Connection for a schedule of events and to research participating employers. Employers who participate in career fairs often interview students after the fair for full-time jobs and internships.

On-campus interviews provide SDSU students the competitive advantage to participate in first interviews with employees in Career Services. These on-campus interviews focus on fulltime employment and summer internship programs. Juniors and seniors are encouraged to review on-campus interviewing in the fall semester since this is when employers recruit most actively.

Students who receive offers to interview via telephone and require a quiet space for conducting these interviews should contact Career Services for access to interview rooms. The center will require a RedID to make space available for students.

## Career Resource Room

Career Services offers students a space in which to explore career options, meet with career peers and student assistants, and study. In the Career Resource Room, computer stations provide access to assessments, Aztec Career Connection, and software for professional activities, such as developing resumes. This room also holds numerous print publications on career topics such as what jobs are available to students with a variety of majors, how to develop a resume, how to prepare for and seek employment in any number of specific industries, and what options exist for graduate and professional schools.

## Campus Connections

Career Services leverages campus contacts to empower students and strengthen the SDSU community. Career Services partners with on-campus areas, such as academic internship coordinators, college faculty, Residential Education Office, the Student Ability Success Center, Student Life and Leadership, Academic Advising, Associated Students, and the Alumni Association. WorkAbility IV is an award-winning partnership with the Student Ability Success Center and the State Department of Rehabilitation. This service provides career-focused support to qualified students. Visit Career Services or the Student Ability Success Center to learn more.

## Career Placement

Career Services may furnish, upon request, information about the employment of students who graduate from programs or courses of study preparing students for a particular career field. Any such data provided must be in a form that does not allow for the identification of any individual student. This information includes data concerning the average starting salary and the percentage of previously enrolled students who obtained employment. The information may include data collected from either graduates of the campus or graduates of all campuses in the California State University.

## Visit the Career Center

Career Services, Student Services East, Room 1200, is open 8 a.m. to $4: 30$ p.m., Monday through Friday. Students can call or stop by to schedule individual appointments with career counselors. Quick Career one-on-one consultations and Fast-15 walk-in appointments occur daily and require no appointment: Monday through Thursday, 1 p.m. to 3 p.m., and Friday, 10 a.m. to noon. Visit the center's website at http://career.sdsu.edu for current schedule information. SDSU alumni are invited to attend career fairs, but other services to alumni may be fee-based. For more information, contact Career Services.

## Compact for Success and

## Collaborative Programs <br> Student Services East, Room 2109

619-594-3685
http://compactforsuccess.sdsu.edu
The Compact for Success and Collaborative Programs department within the division of Student Affairs collaborates with various schools, districts, and community partners to impact the outreach, recruitment, and retention goals of the university. The department is composed of two main programs: Compact for Success and Price Community Scholars.

The Compact for Success, established in 2000, is an agreement between SDSU and the Sweetwater Union High School District (SUHSD) that guarantees admission to SUHSD students (up to the class of 2024) who meet the Compact for Success admissions requirements. The Compact for Success department collaborates with school and district personnel to provide outreach and education to students and parents in the district through mentoring, workshops, assemblies, and campus visits. Our department employs work-study students (Compact Mentors) who serve as mentors and role models to middle and high school students in the SUHSD.

The Price Community Scholars Program assists in the recruitment and support of fifteen (per cohort) high-achieving San Diego State University (SDSU) students from City Heights (primarily from Hoover and Crawford High Schools) with a scholarship of up to $\$ 7,500$. The Price Community Merit-Service Scholarship Committee selects prospective high achieving SDSU students to each mentor three City Heights middle school students for a period of four years. This initiative provides programs for both mentor and mentee that assists in building a community that enhances the path to higher education through academic success, self-awareness, cross-cultural exchange, and civic participation.

## Counseling \& Psychological Services (C\&PS)

Calpulli Center, Room 4401
619-594-5220
http://studentaffairs.sdsu.edu/cps/
Counseling \& Psychological Services (C\&PS) provides a variety of services to enrolled SDSU students. Students interested in services should call to consult with a therapist for recommendations. These confidential services are covered by the student health fee.

The Center for Well-Being offers resources designed to help students help themselves. Several stations are set up to include hands-on activities that promote relaxation and stress reduction. The center has a small library of self-help books and can be a relaxing place to spend time. The alpha chamber egg chairs and massage chair provide environments where students experience deep relaxation.

C\&PS groups and workshops address issues common to many university students. As appropriate, students are encouraged to participate in these interactive and dynamic forums:

- C.O.P.E. (Cultivating Optimal Personal Experiences);
- Everyday Mindfulness and Meditation;
- Healthy Emotional Living;
- Living with Loss;
- Rise (group for sexual assault survivors);
- Students in the Helping Professions;
- Various Single Servings (one-time workshops).

Crisis intervention services are available at C\&PS for students who are in need of immediate assistance because of a severe emotional crisis that may be life threatening or otherwise require immediate attention. Examples of urgent situations may include: being a recent victim of assault, grieving the recent death of a friend or family member, or thinking about suicide. After hours and weekend emergency assistance can be obtained through the San Diego Access \& Crisis Line at 888-724-7240 (administered by the County of San Diego).

Other services available at C\&PS include:

- ASPIRE - individualized program designed for students to address their substance use;
- Biofeedback computer/technology-based, four-session intervention for anxiety reduction;
- Bounce Back - one unit, semester-long course designed to help students on academic probation;
- Individual, couple, and family counseling;
- Successful Community Living - workshop designed around themes of community and civility;
- Web resources - anxiety, assessment tools and intervention for alcohol and other substance use, depression, disordered eating, music to assist with regulated, diaphragmatic breathing. relationships, stress, and trauma.


## Educational Opportunity Program and Ethnic Affairs (EOP) <br> Student Services East, Room 2109

619-594-6298
eopappt@sdsu.edu
http://eop.sdsu.edu
The Office of Educational Opportunity Programs and Ethnic Affairs (EOP) provides innovative programs and services that facilitate the successful recruitment, retention, and development of scholars and leaders as they persist toward a university degree. Eligible students are low-income California residents who may only be admitted prior to their first semester of attendance at SDSU. Students who meet AB 540 criteria also qualify.

EOP offers the following ongoing services:

- Outreach, recruitment, and admission;
- One-on-one counseling (academic and personal);
- Financial aid counseling;
- Learning Support (a space for studying, tutoring, and workshops);
- Support and space for our undocumented and mixed status students;
- An intimate graduation ceremony for our students and their loved ones.
EOP students at SDSU are also provided with summer transitional programming to include:
- First Contact Orientation;
- BEST Summer Bridge Program;
- Transfer Bridge Program.

EOP students have the opportunity to apply for peer-to-peer mentoring through the SOAR Mentoring Program and support from our Guardian Scholars Program, which serves students who identify as current or former foster youth, dependents and wards of the court, students under legal guardianship, and unaccompanied homeless youth. EOP students may also qualify for an EOP grant (depending on individual financial aid award and need).

Additional services for EOP students include wellness coaching, study abroad advising, career services advising, and CalFresh assistance. EOP students gain leadership experience through department supported student organizations, to include the EOP Student Advisory Board, Guardian Scholars Student Advisory Board, and Education Without Borders.

EOP advocates for multi- and cross-cultural activities to enhance the campus climate and increase the awareness of diversity on campus. EOP houses the Undocumented Resources Area to support undocumented students at SDSU. This resource is available to all students, including those who are not involved in EOP programming.

## Housing Administration and Residential Education

## 6001 Lindo Paseo

619-594-5742
http://housing.sdsu.edu
The Office of Housing Administration (OHA) and the Residential Education Office (REO) at SDSU are committed to fulfilling the university's mission of "educating the whole person" by offering students a living environment conducive to academic and personal success. According to research findings of the American Council on Student Services and research at SDSU, students who live on campus enjoy an increased sense of community and campus connectedness, are better prepared academically, and graduate at faster rates than those who do not.

All first-time freshmen from outside SDSU's local admission area are required to live on campus for their freshman and sophomore years. Additionally, all local students in the Weber Honors College are required to live on campus during their freshman year. SDSU's residency requirement is in alignment with the California State University (CSU) Graduation Initiative of 2025 to improve student academic success, retention, and graduation rates.

To suit the varying needs of a diverse and dynamic student population, a variety of living environments are offered convenient to campus facilities. The housing license agreement includes a meal plan, which is optional beyond the first year. An active residential student government, the Residence Hall Association (RHA), provides students with leadership experience and opportunities to make an impact in their on-campus community.

## Freshman Communities

As freshmen, students have the option to apply to live in an academically focused Residential Learning Community (RLC). RLCs provide students with a unique opportunity to connect and learn, both inside and outside the classroom. In RLCs, students live alongside other students with shared academic or co-curricular interests and are enrolled in a connected set of academic courses to help produce smaller, more intentional communities that promote student success.

## Current RLCs include:

- Adventures in Surfing and Sustainability;
- Business;
- Discover San Diego State;
- Emerging Leaders Program;
- Future Education Professionals;
- Health and Healing Professions;
- Journalism and Media Studies;
- Journey to Entrepreneurship;
- METS (Men Engaging in Technology and Science);
- Nursing;
- Physical Fitness;
- Pre-Law Community;
- Pride House (LGBTQIA+);
- Toltec House (for undeclared majors);
- Visual and Performing Arts;
- WAGE (Women's and Gender Equality House);
- Weber Honors College;
- WISE (Women in Science and Engineering).

Freshmen can indicate their interest in RLCs, room type, and roommate, as well as whether they would like to live in a facility that is open during the academic break periods. Freshmen communities offer traditional residence hall and suite-style living with triple or double occupancy accommodations. Single and quad occupancy rooms are very limited.

## Sophomore Communities

Sophomore students will enjoy more independence along with special programs, services, and amenities designed to promote academic and personal success. Sophomore housing provides more flexible guest, meal plan, and roommate policies along with specialized Sophomore QUEST programming, to include study abroad preparation, academic advising, career planning, and other programs known to contribute to student success. Sophomores can select their room type, roommates, and whether they would like a 9 - or 11.5 -month license agreement. Sophomore communities offer apartment- and suite-style living with single or double occupancy accommodations.

## Application For Housing

Incoming freshmen can apply for on-campus housing in early March via the housing portal. To access the housing portal, students must have accepted their offer of admission by submitting their intent to enroll on the SDSU WebPortal.

Students looking for housing options while attending SDSU may find information and assistance at the Office of Housing Administration (OHA). Visit http://housing.sdsu.edu for a description of the various housing options and more information on the housing application process.

## International Student Center (ISC)

## International Student Center

## 619-594-1982

http://isc.sdsu.edu/student_affairs/isc/
The International Student Center (ISC) advances San Diego State University as a global university by serving as the crossroads for international students seeking educational opportunities at SDSU, and for SDSU students seeking educational opportunities in other countries. The ISC offers a full range of programs and services to a variety of communities on and off campus in an effort to foster student success, global perspectives, intercultural awareness, and international goodwill.

## International Students

Working closely with more than 2,200 international students from more than 90 countries spanning the globe, the ISC provides support services that meet the logistical, regulatory, cultural, academic, and personal development needs unique to SDSU's most diverse student community.

The International Student Center coordinates a variety of activities designed to foster intercultural goodwill, understanding, and friendship. One such activity is provided by the Intercultural Ambassadors Program through which selected international students make home-country presentations in San Diego schools. In addition, the ISC invites faculty, staff, and the community to participate in the many events listed in the ISC calendar of intercultural
activities. These include the Global Aztec Alliance, International Coffee Hours, international film festivals, International Peace Village, International Student Association, and intercultural workshops.

## Study Abroad Programs

The International Student Center (ISC) provides services to all students who want to study abroad as part of their educational experience at SDSU. The SDSU Study Abroad office in the ISC serves as a study abroad resource center and acts as a window to the world for students beginning the study abroad journey. When students have questions about how to study abroad, what opportunities are available, or how to prepare for their time abroad, the ISC becomes their one-stop shop. In addition, the ISC:

- Administers SDSU's reciprocal student exchange programs, providing various support services for participants in more than 110 agreements SDSU has signed with institutions around the world;
- Serves as SDSU's liaison with the CSU International Programs Office (see the CSU International Programs listing) that offers CSU students the traditional year of study abroad experience and coordinates all promotion, recruitment, selection, processing, and orientation for the participants from SDSU;
- Assists, in coordination with SDSU's Risk Management Program, with ensuring all SDSU students who study or travel in other countries are adequately insured and prepared for maintaining optimal health and safety abroad, and for planning how to respond to a wide range of possible emergencies;
- Plays a central role in SDSU's efforts to dramatically increase study abroad enrollment. The number of SDSU students studying abroad has increased more than 900 percent (from 167 to more than 3,000 students), ranking the university as 8th in the national overall for the number of students studying abroad (source: IIE 2015).
For more information about SDSU Study Abroad programs, contact the SDSU Study Abroad office at 619-594-2475.


## The California State University <br> International Programs (CSU IP)

Developing intercultural communication skills and international understanding among its students is a vital mission of The California State University (CSU). Since its inception in 1963, the CSU International Programs (CSU IP) has contributed to this effort by providing qualified students an affordable opportunity to continue their studies abroad for a full academic year.

More than 20,000 CSU students have taken advantage of this unique study option.

International Programs participants earn resident academic credit at their CSU campuses while they pursue full-time study at a host university or study center abroad. CSU IP serves the needs of students in more than 100 designated academic majors. Affiliated with more than 50 recognized universities and institutions of higher education in 18 countries, CSU IP also offers a wide selection of study abroad destinations and learning environments.

Australia. Griffith University, Macquarie University, Queensland University of Technology, University of Queensland, Western Sydney University
Canada. Concordia University
Chile. Pontificia Universidad Católica de Chile
China. Peking University (Beijing)
Denmark. Danish Institute for Study Abroad
France. Institut Catholique de Paris, Institut Supérieur d'Electronique de Paris, Université d'Aix-Marseille (Aix-enProvence), Université de Cergy-Pontoise, Universités de Paris I, III, IV, VI, VII, VIII, X, XI, XII, XIII, Université Paris-Est Marne-la-Vallée, Université d'Evry Val d'Essonne, Université de Versailles Saint-Quentin-en-Yvelines
Germany. University of Tübingen and a number of institutions of higher education in the Federal state of Baden-Württemberg
Ghana. University of Ghana
Israel. University of Haifa
Italy. CSU Florence Study Center, Accademia di Belle Arti Firenze

Japan. Waseda University, University of Tsukuba
Mexico. Instituto Tecnológico y de Estudios Superiores de Monterrey, Campus Querétaro
South Africa. Nelson Mandela University
South Korea. Yonsei University
Spain. Universidad Complutense de Madrid, Universidad de Granada, Universidad de Jaén
Sweden. Uppsala University
Taiwan. National Taiwan University
United Kingdom. University of Bradford, University of Bristol, University of Hull, Kingston University, Swansea University
Students participating in CSU IP pay CSU tuition and program fees, and are responsible for airfare, accommodations, meals, and other personal expenses. Financial aid, with the exception of Federal Work-Study, is available to qualified students and limited scholarship opportunities are also available. All programs require students to maintain good academic and disciplinary standing; many programs are open to sophomores or graduate students. California Community College transfer students are eligible to apply (to select programs) directly from their community colleges. Students must possess a current cumulative grade point average of 2.75 or 3.0 , depending on the program, and must fulfill all coursework prerequisites. Additional program information and application instructions can be found on our website at https:// www.calstate.edu/ip.

## New Student and Parent Programs

## Student Services West, Room 1602

619-594-1509
Parent Hotline: 619-594-1653
http://studentaffairs.sdsu.edu/nspp
The Office of New Student and Parent Programs provides undergraduate students and parents with the preparation, information, and support necessary for student success as they enter the university community. As a department within the Division of Student Affairs, our programs and services assist students and parents in understanding the goals and expectations of them in this dynamic university community. The academic and personal growth of SDSU students is enhanced through a partnership between parents and the university. We believe that parents are valuable partners in the education of their students.

Research has shown that students who make a connection early in their college career, who are given proper tools to navigate the university, and who have involved parents, are more likely to be academically successful, and have a better all-around college experience.

We support new SDSU students in the achievement of their academic goals and enrich their university experience through quality programs in preparation for their academic journey. We provide programs and services to parents of SDSU students through our Aztec Parent Programs. Our new student and parent programs and services include: New Student Orientation, New Student and Family Convocation, Welcome Week, Campus Tours, the SDSU Ambassadors, the Aztec Parents Association, News for Aztec Parents magazine, a parent liaison, and Family Weekend.

## New Student Orientation

The office coordinates all orientation programs for newly admitted undergraduate students and their parents. All incoming freshmen and transfer students are expected to attend New Student Orientation. At orientation, students receive academic advising and assistance in selecting their courses. They learn what it means to be a member of the SDSU community and how to get involved. The separate but concurrent Parent Orientation helps parents of new students understand policies, graduation requirements, and issues facing college students today.

## New Student and Family Convocation

Convocation is a ceremony to honor a new beginning. Held shortly before classes begin each fall, it is a time to officially welcome all new students and their families to our university community. Each year, thousands of new students and their families mark the important transition of attending SDSU by attending this ceremonial event.

## Welcome Week

Welcome Week is a special tradition at SDSU. It is filled with fun and informative events for all students - new freshmen and transfer students; commuter students and those living on campus; and returning students. Welcome Week is considered a "must" for students who want to really know SDSU and its resources. Welcome Week features interactive activities, entertainment, college tips and special events for students to enjoy, and is held at the beginning of each fall semester.

## The SDSU Ambassadors

The SDSU Ambassadors are the official student representatives, tour guides, and orientation leaders of San Diego State University. The Ambassadors are carefully selected and trained in order to represent SDSU at new student orientation programs and at campus and community events. To find out how to become an Ambassador please contact the Ambassadors at 619-594-6868 or via e-mail at ambassad@sdsu.edu.

## The Aztec Parents Association

SDSU values parents as partners. The better informed parents are about SDSU, the better resource and coach they can be for their students. The Aztec Parents Association encourages parents to stay involved in their student's education and support programs and services for SDSU students. The Aztec Parents Association is the parent's personal connection to SDSU. The following programs and services are provided to the parents of SDSU students:

- On-campus liaison, giving parents a direct connection to the university when they have a question or need assistance.
- News for Aztec Parents magazine for parents and families of SDSU students, mailed directly to their homes twice a year.
- E-mail communication regarding important university information.
- Parent Orientation - Parent Orientation runs concurrently with New Student Orientation in the summer. Parent Orientation will educate parents on SDSU's programs and services and how to contribute to the personal development and academic success of students.
- Family Weekend - Each fall, the Aztec Parents Association sponsors Family Weekend. Family Weekend is a time to celebrate family, friends, and SDSU! Invite your parents to join you and other students and parents to experience college life, Aztec football, and more!
- Aztec Parents Fund - The goal of Aztec Parents Fund is to enhance programs and services that directly benefit students, such as safety, wellness, leadership, and much more.
- Special campus and travel discounts.


## Office of the Student Ombudsman

## Student Services East, Room 1105

619-594-6578
http://go.sdsu.edu/student_affairs/ombudsman/
Becoming a student at SDSU also means becoming a member of a special community that includes students, faculty, staff, and administrators. As a member of this community, students are responsible for knowing and complying with established rules and regulations.

The student ombudsman is an independent and impartial agent who helps individuals and groups seeking the resolution and correction of complaints. The student ombudsman acts as a liaison between students and the university, assisting students through formal grievance procedures and functioning to mediate and reinforce other means of redress when possible. This office does not supplant existing avenues of redress. It exists to encourage appropriate and timely access to those existing processes that may best resolve the problem.

Examples of student complaints that have been resolved through this process include disputes over grades, faculty or staff conduct, academic disputes, appeals or waivers, administrative policies, and institutional compliance with federal and state nondiscrimination laws. Should a complaint not be resolved at the
referral level, the student ombudsman may act as a mediator and suggest compromise solutions between parties. If the problem is still unresolved, the student may file a grievance with the student grievance committee. No student grievance can be filed with this committee later than the last day of the semester (excluding summer term) after the semester during which the student was allegedly aggrieved.

## Student Ability Success Center

Calpulli Center, Room 3101
619-594-6473
http://www.sdsu.edu/sasc
The Student Ability Success Center is dedicated to the following: empowering students with disabilities, ensuring they have access to appropriate support and services, and minimizing academic and physical barriers in order to promote retention and graduation. The center is responsible for providing academic accommodations for students with disabilities including, but not limited to, attention deficit disorder, deaf and hard-of-hearing, learning disabilities, physical and chronic disabilities, psychological disabilities, and visual impairments.

Services and accommodations may include housing, note-taking, real-time captioning, sign language interpreters, testing, and textbooks in accessible formats. At SDSU, students initiate contact with the center by providing appropriate documentation in order to determine eligibility.

In addition, the center has the high tech center, which offers computer workstations with assistive technology, hardware, and software. For students who may need additional support through peer mentoring, tutoring, and writing support, the center offers the TRIO-SSS Program, funded through a grant from the U.S. Department of Education. Internship and pre-employment services are available through Workability IV program for students who are Department of Rehabilitation students. Students with temporary disabilities may request assistance with cart service, note taking, or test taking.

## Student Health Services

## Calpulli Center

619-594-4325
http://shs.sdsu.edu
Student Health Services provides basic medical care through board certified physicians, certified primary care nurse practitioners, licensed nurses, and other qualified personnel to enrolled SDSU students. All enrolled SDSU students who have paid a health fee can utilize services. Questions about eligibility should be directed to Medical Records at 619-594-4325, option 8. The health fee provides students with basic medical care and therefore does not waive requirements under the Affordable Care Act.

Student Health Services is located at Calpulli Center and is open 12 months of the year between the hours of 8:30 a.m. and 4:30 p.m. on Monday, Tuesday, Thursday, and Friday and 9:30 a.m. to $4: 30$ p.m. on Wednesday, with the exception of campus closures.

## Appointments and After Hours Care

Students are encouraged to visit HealtheConnect at https:// healtheconnect.sdsu.edu to request advance appointments for non-urgent matters. Same day and advance appointments can be scheduled by calling Student Health Services at 619-594-4325. When Student Health Services is closed, a telephone advice line staffed with a registered nurse is available by calling 858-2253105. Students experiencing a medical emergency should immediately call 911.

## First Aid

First aid is defined as one-time treatment that typically does not require a laboratory, pharmacy services, physician, or x-rays. Accidents requiring treatment and/or transportation to Student Health Services or a local hospital should be reported immediately to the University Police Department, 619-594-1991. Student Health Services provides first aid during normal operating hours to all persons injured while on the campus.

## Services

Students typically gain access to most services by registering to use HealtheConnect at https://healtheconnect.sdsu.edu. Through this secure website students can request appointments, upload immunization documents, and view health records. No one, on or off campus, other than Student Health Services staff, has access to medical record information without written permission from the student.

Some Student Health Services other than basic care may include additional fees. Charges associated with services are usually significantly lower than those found elsewhere. Student Health Services accepts California's Family PACT program designed to help low-income individuals access family planning services.

Student Health Services does not accept any other forms of insurance. Students are responsible for the cost of their healthcare whether received at Student Health Services or at an outside facility. A community resource specialist is available in the Well-being and Health Promotion department to provide information and assistance to students when needed. Questions regarding insurance coverage for specific campus programs, institutional safety regulations, and potential risks inherent in academic programs and student activities should be directed to the responsible faculty or staff member in charge of the activity.

## Immunizations and Required Tuberculosis Screening

If students do not have a required immunization, they can obtain it through their primary care provider using their health insurance or through Student Health Services. For more information about immunizations at Student Health Services, call 619-594-4325.

## Immunization Records and Requirements

Students may fulfill immunization requirements by submitting medical documentation as proof of immunization online through the secure HealtheConnect at https://healtheconnect. sdsu.edu. Positive laboratory evidence of immunity may also be used to prove immunization status; for more information, call 619-594-4325. Students who have not complied with immunization requirements by the schedule adjustment deadline (add/ drop deadline - the 10th day of classes each semester) will have a registration hold for their second semester. Registration for the spring semester will begin in November 2019. To clear the registration hold, students must provide proof of immunity, receive the required immunization, or begin the required immunization series.

The following immunizations and screenings/risk assessments are required:

- Measles, Mumps and Rubella (MMR): Two (2) doses with first dose on or after first birthday OR positive titer (laboratory evidence of immunity to disease).
- Varicella (Chickenpox): Two (2) doses with first dose on or after first birthday OR positive titer. History of contracting the disease does not meet compliance.
- Tetanus, Diphtheria and Pertussis (Tdap): One (1) dose after age 7.
- Meningococcal conjugate (Serogroups A, C, Y, \& W-135): at least one dose at age 16 or beyond for students up to age 23.
- Meningococcal B (Meningitis B): Students age 16 - 23. Complete series, may be 2 or 3 doses.
- Hepatitis B (Hep B): Students age 18 and younger should complete series. Based on type of vaccine the series is either 2 or 3 doses (CA Health \& Safety Code, Sec. 120390.5).
- Tuberculosis (TB) Screening/Risk Assessment: All incoming students must complete a Tuberculosis risk questionnaire. This questionnaire can be found at http://shs.sdsu.edu/immunizations.asp or on the Forms tab in HealtheConnect. Incoming students who are at higher risk for TB infection as determined by the screening questions, should undergo testing for TB infection within 1 year of SDSU entry.
The following immunizations are strongly recommended:
- Hepatitis $A(\operatorname{Hep} A)$ : All students regardless of age.
- Hepatitis B (Hep B): Students age 19 and older.
- Human papillomavirus (HPV): For women and men through age 45.
- Influenza (Flu): Annually; all students regardless of age.
- Pneumococcal: For all students older than 65 and for students with certain medical conditions (e.g., severe asthma, diabetes, chronic liver or kidney disease).
- Poliovirus (Polio): Regardless of age, if the series was not completed as a child.


## Additional Requirements

Some students may be further required to present documentation to other campus officials. Students subject to this additional screening include students enrolled in dietetics, medical technology, nursing, physical therapy, student teaching, or fieldwork involving preschool-age children and/or school-age children or taking place in a hospital or health care setting. Programs involving international travel may require or recommend further immunizations in accordance with the California Department of Public Health (CDPH) and Centers for Disease Control (CDC) guidelines. Questions should be directed to the responsible faculty or staff member in charge of the activity.

## Student Health Advisory Committee (SHAC)

Students can offer important feedback about the scope of services and other critical issues relating to campus health services through membership on the Student Health Advisory Committee (SHAC). Members act as liaisons between the SDSU student body and Counseling and Psychological Services, Student Health Services, and Well-being and Health Promotion. SHAC helps to keep Student Health Services staff focused and current on major student health issues. Membership from all academic majors is encouraged. For information about becoming a member contact Student Health Services at 619-594-4325.

## Medical Excuse Policy

Student Health Services does not provide medical excuses for short-term absences due to illness or injury. In circumstances when the illness or injury is prolonged (an absence of more than five days) and requires medical attention or hospitalization, Student Health Services will work with students to provide appropriate documentation. When a student is hospitalized or has a serious, ongoing illness or injury, Student Health Services will, at the student's request and with the student's consent, communicate with the student's instructors via the Vice President for Student Affairs and may communicate with the student's assistant dean and/or the Student Ability Success Center.

Students are instructed to contact their professor/instructor/ coach in the event that they need to miss class, etc. due to an illness, injury, or an emergency. All decisions about the impact of an absence, as well as any arrangements for making up work, rest with the instructors. Assistant deans may provide assistance to students or faculty members who have concerns about attendance issues.

## Student Life \& Leadership

Conrad Prebys Aztec Student Union, Room 210
619-594-5221
http://sll.sdsu.edu

- Commuter Life - encourages students who do not live on campus to take steps to develop a sense of belonging to the SDSU community. Students driving to and from campus can find resources and support programs through the Commuter Resource Center, located on the second floor of the Conrad Prebys Aztec Student Union, and through commuter student learning communities. http://go.sdsu.edu/student_affairs/sll/commuterlife.aspx.
- Fraternity and Sorority Life - consists of approximately 50 social fraternities and sororities, including both general and culturally based organizations, represented by four governing councils. Greek-letter social organizations create smaller communities within the larger university environment for the purposes of facilitating academic support, leadership development, and personal growth. Fraternities and sororities also offer students opportunities for alumni networking, campus involvement, community service, friendship, participation in social and recreational activities, and small group living.

Membership recruitment occurs at the beginning of each semester for most organizations, while others have ongoing intake processes. http://go.sdsu.edu/student_affairs/sll/ greeklife.aspx.

- Jeffrey W. Glazer Center for Leadership and Service offers programs and resources to SDSU students, faculty, staff, and community members interested in participating in community service and leadership development. The center offers certificate programs in both leadership and community service while providing workshops and seminars focused on leadership development, personal growth, and community service engagement. http://go.sdsu.edu/student_affairs/sll/ leadership-home.aspx.
- Student Organizations and Activities - facilitates on-campus recognition for student organizations, implements policies and procedures with regard to student activities, and approves all on-campus activities, including fundraising events. For more information, visit http://go.sdsu.edu/student_affairs/ sll/student-orgs.aspx.


## Student Rights and Responsibilities

## Student Services West, Room 1604

619-594-3069
http://csrr.sdsu.edu/student_affairs/srr/
The Center for Student Rights and Responsibilities is responsible for acting on behalf of the university president regarding all aspects of student discipline. The center receives reports of alleged student misconduct relative to Title 5, California Code of Regulations, and investigates complaints in order to determine whether university disciplinary action is to be pursued. University disciplinary action may run concurrently with civil or criminal action and/or the residence hall eviction process, which is initiated by the court system. One type of judicial action does not necessarily affect the other. In addition, sections of the Code of Conduct may be adjudicated regardless of location of incident.

Alleged campus-related violations include both academic and non-academic misconduct, specific misconduct in the surrounding community, specific misconduct regardless of location, off-campus community-sponsored or university events, and online sites.
To review information regarding the Standards for Student Conduct, the discipline process, privacy rights, and complaints procedures, visit http://studentaffairs.sdsu.edu/srr.

## Testing Services

Student Services West, Room 2549
619-594-5216 / FAX: 619-594-5036
http://studentaffairs.sdsu.edu/STAAR/
Testing Services, within the Division of Student Affairs, supports and enhances student success by providing secure, high-quality test administration while maintaining academic integrity for SDSU students and the greater San Diego community. Testing Services is an important resource for the entire university community, supporting the academic and professional goals of students and faculty by administering and analyzing paper- and computer-based tests for the purposes of admission, class placement, credentials, and graduation requirements. Proctoring services are also available for distance learning, make-up examinations, and online certification.

SDSU campus placement examinations include:

- California Government Examination;
- Chemistry Department Placement Examination;
- Grammar, Spelling and Punctuation test;
- Japanese Language Proficiency Examination;
- Liberal Studies Mathematics Proficiency Assessment;
- SDSU Mathematics Placement Assessment;
- Spanish Language Proficiency Examination;
-Writing Placement Assessment.
Community examinations include the GRE, LSAT, TEAS, and TOEFL, among other national examinations. Most reservations for national examinations are made through the testing agencies' websites.

Testing Services adheres to the professional standards and guidelines of the National College Testing Association (NCTA) and is NCTA-certified.

## Well-being and Health Promotion

## Calpulli Center, Room 3201

619-594-4133
http://healthpromotion.sdsu.edu
Staffed with professionals and experts to students through education, skill building, and case management, the department's goal is to assist students with all aspects of their health and well-being, including nutrition, sexual health, alcohol and other drugs, sleep, accessing resources on campus, healthcare coverage, medication assistance, and basic needs support (economic, food, and housing insecurity). Students receive health-related education, referrals and training, one-on-one education sessions led by professionals and peer educators, and topic-specific workshops.

Well-being and Health Promotion provides health education and skill-building opportunities to students through classes, engagement centers, and student organizations. Health educators and subject experts offer students free nutrition education, reproductive health education sessions, as well as many presentations, workshops, and outreach events covering a variety of health and wellness topics. Students receive health-related education, referrals and training, one-on-one education sessions led by professionals and peer educators, and topic-specific workshops.

The staff includes a community resource specialist, health educators, and subject experts who offer education and information on alcohol and other drugs, consent and sexual violence prevention and intervention, helping others, nutrition, sexual health, sleep strategies, and understanding campus resources. The community resource specialist can also assist with off-campus referrals for medical care, understanding health policies, utilization of health care services, and referrals to county, state, and federal aid programs. The Economic Crisis Response Team (ECRT) coordinator assists students who are experiencing unforeseen financial crises or who are experiencing housing or food insecurity. There are enrollment specialists available to help students apply for CalFresh food assistance and health insurance.

Services and programs include:

- Alcohol and other drug prevention education;
- Case management for students in crisis;
- Community resources and referrals;
- Cooking classes;
- Gynecological orientation - includes information on pelvic examinations and birth control options;
- Health insurance assistance;
- Health outreach events and campaigns around campus;
- Individual and small group health education workshops;
- Peer Health Education (PHE) programs.


# Division of Diversity and Innovation 

OFFICE: Professional Studies and Fine Arts 100
TELEPHONE: 619-594-0523

## Administration

Chief Diversity Officer and Associate Vice President
for Diversity and Innovation: J. Luke Wood
Associate Chief Diversity Officer,
External Affairs: Mohamed M. Ahmed
Associate Chief Diversity Officer,
Faculty and Staff Success: Jennifer Y. Imazeki
Associate Chief Diversity Officer,
Student Engagement: Jessica L. Nare
Assistant Chief Diversity Officer,
Director of Identity Centers: Augie Garibay

## General Information

The Division of Diversity and Innovation (DDI) strives to advance diversity and inclusion as the drivers of innovation and excellence, fostering a community where students, faculty, staff, and alumni of all backgrounds and identities can succeed and feel at home. Our mission is to elevate and celebrate inclusive excellence through equity-driven innovations that build and sustain structures, practices, and cultures that advance the welfare of all peoples while honoring the institution's identity as a Hispanic Serving Institution and residence on Kumeyaay land. The division works proactively to address systemic inequities through professional learning, community building, advocacy, policy recommendations, and organizational structures, while facilitating an integrated vision and shared responsibility for prioritizing and advancing institutional goals. We aim to foster an affirming campus culture based on the core values of excellence, equity, diversity, belonging, and inclusion through:

- Recruiting and retaining faculty and staff who are reflective of the diverse student body and communities served by SDSU, and recruiting students who are representative of the rich diversity of the region and the world;
- Fostering an environment that is welcoming, affirming, and empowering for students, faculty, staff, and alumni of all backgrounds;
- Enhancing career and educational pathways of a diverse student body, faculty, and staff; and
- Cultivating relationships with the local community that advance the well-being of diverse individuals and communities.


## The Center for Inclusive Excellence

The Center for Inclusive Excellence provides professional learning and community-building programs for all faculty and staff. These include:

- Professors of Equity in Education provides intensive, ongoing professional learning opportunities for SDSU faculty on diversity-related topics. Professional learning opportunities address unconscious and implicit bias, racial/gender microaggressions, teaching practices for underserved students, socio-cultural competency and what it means to be a Hispanic Serving Institution.
- Employee Resource Groups (ERGs) are designed to build an inclusive environment for SDSU employees from various employment groups, with particular attention to employees from historically underrepresented and underserved backgrounds. ERGs foster an environment of inclusion for faculty and staff from underrepresented groups with a goal to enhance the career pathways of faculty and staff from these underrepresented groups. Through visibility, awareness, and/or mentorship, ERGs work to bolster the pipeline of diverse students through the pathways of higher education by cultivating relationships with the local community in an effort to advance the well-being of diverse individuals and communities.
- Inclusive Research and Scholarly Excellence aims to provide enhanced support to faculty engaged in scholarship that supports equity, diversity, and inclusion. Programs include writing groups, networking events, mentoring workshops, and seminar series.
- Building on Inclusive Excellence allocates additional ten-ure-track faculty lines for qualified candidates identified in regular faculty searches who meet criteria aligned with SDSU's commitment to diversity.


## Cultural Centers

## Black Resource Center (BRC)

5723 Lindo Paseo
619-594-3502
https://diversity.sdsu.edu/brc
The Black Resource Center (BRC) strives to promote Black Excellence and to provide a safe and welcoming environment where students, staff, and faculty of the African diaspora can congregate, collaborate, and cultivate a unified community. The BRC provides a space where we can reflect upon, honor, and celebrate our past and present, as well as plan for our future. Through strategic and ongoing collaborative efforts, the BRC promotes intellectual exploration and academic achievement through educational, scholarship, and research initiatives; professional and career development strategies; and leadership and service opportunities. Founded upon the principles of achievement, balance, creativity, solidarity, and love, the BRC, through an ongoing series of student success programs and rich dialogues focusing on social justice issues, dedicates its resources to addressing the intellectual, mental, spiritual, and physical needs of our Black student community and innovatively equipping them with critical skills needed to achieve academic and personal success within and beyond our campus.

## Center for Intercultural Relations (CIR)

## Conrad Prebys Aztec Student Union, Room 250

619-594-7057
https://diversity.sdsu.edu/cir
The Center for Intercultural Relations (CIR) researches, designs, and implements unique programs that promote the appreciation of cultural diversity and fosters intercultural and cross-cultural understanding. The CIR provides programs and services that support the academic mission of the university by enhancing the educational, personal, cultural, and social development of students. The CIR strives to build positive advocacy and collaborative relationships with the general student body with a special emphasis toward underrepresented student populations. Programs and services expand students' cultural horizons and honor their respective cultural experiences. Intercultural Relations works in conjunction with university colleges and departments to conduct programs related to recruitment, orientation, retention, and graduation of students. The center also offers programs and workshops on academic, personal, professional, and cultural development, all of which support student success at SDSU.

## Latinx Resource Center (LRC)

## https://diversity.sdsu.edu/Irc

The Latinx Resource Center (LRC) cultivates a student-centered and welcoming environment for Latinx identifying students. The LRC encourages students of a Latinx background to embrace their culture through events, celebrations, programs, and services while connecting with other students, faculty, staff, and the community. The LRC provides access to culturally proficient mentors assisting students with emotional, social, and academic engagement. The LRC invites students to learn more about issues that are faced within the Latinx communities, particularly centering the voices of the most marginalized, such as low-income, LGBTQIA+ identifying individuals, students working multiple jobs, students with disabilities, transborder students, and any intersection across those lines.

Mind, Body, and Spirit Center(s)
Digital Humanities Center (LA 61A)
Conrad Prebys Aztec Student Union, Room 250
The Mind, Body, and Spirit Center is a space for individuals of all religious faiths and non-religious beliefs to focus on their mind, body, and spirit, whether in prayer, meditation, or quiet contemplation. The spaces are designed to support students' extracurricular needs. By providing a quiet space for quiet contemplation, reflection, and prayer, the spaces support students in holistic ways that extend beyond the classroom.

## Native Resource Center

## Arts and Letters

https://diversity.sdsu.edu/nrc
The Native Resource Center at SDSU, residing on Kumeyaay Land, facilitates the academic and personal success of Native American and Indigenous identified students through: relevant and accessible programming and resources, services to identify and address barriers to academic achievement, community building, on- and off-campus partnerships, and advocacy for the inclusion of Native American/Indigenous peoples' unique histories, cultures, and perspectives in campus programs and curriculum.

## The Pride Center

## 5141 Campanile Drive

619-594-3520
https://diversity.sdsu.edu/pride
The Pride Center creates, strengthens, and sustains an affirming, inclusive, open, and safe gathering space for persons of all gender and sexual identities and their allies. It also
facilitates awareness, campuswide education, dialogue, and research on issues related to sexuality and gender. The center addresses the needs of students who may experience disenfranchisement, discrimination, harassment, or other barriers to student success as a result of their gender identity, sexual orientation, or expression.

## Women's Resource Center (WRC)

## 5121 Campanile Drive

619-594-2304
https://diversity.sdsu.edu/wrc
The Women's Resource Center (WRC) strives to provide a vibrant, brave, and inclusive space that educates, empowers, and advocates for womxn's rights. The Women's Resource Center (WRC) career staff and student leaders engage students in discourse and programs that help create a campus culture rooted in gender justice. The WRC team provides students with the tools and resources necessary to cultivate feminist leadership. The WRC partners and collaborates with faculty, staff, alumni, and community members, linking SDSU with the larger San Diego community. The WRC provides support to students facing gen-der-based oppression by creating an environment that fosters healing, intersectional feminist activism, and enhancement to students' academic, personal, and professional success.

## Center for Transformative Justice

https://diversity.sdsu.edu/ctj
Through student support programs, community outreach, and interdisciplinary conversations across SDSU and beyond, the Center for Transformative Justice explores justice that transforms-ourselves, our relationships, and our communities. Informed by the pioneering work of Project Rebound, the CSU initiative bridges the worlds of incarceration and higher education and informs our understanding of transformative justice, to include repairing harm in relationships and changing systems that cause harm. Whether justice is framed in terms of freedom or equity, opportunity or protection, collective responsibility or being made whole, it is a process that reveals itself in relation to our own and each other's humanity. Transformative justice work is internal, relational, structural, and ongoing.

# Special Programs and Services 

## Academic Computing

SDSU provides access to a large number of software packages including large research-oriented databases, Microsoft Office Suite (word processing, spreadsheets, presentations), programming languages, relational databases, and statistical software. E-mail accounts are provided to students and server accounts are available for those who want to create websites.

The university has more than 2,000 desktop computers located in 80 departmental/college computer laboratories. The largest laboratories, which are open to all students, are the Student Computing Hub located in Love Library, Room 200 (PCs, Macs, and printing) and the College of Arts and Letters Laboratory, located in Professional Studies and Fine Arts, Room 136 (PCs and printing). Outside of the laboratories, students may connect to the wireless network, which covers the entire campus. Many SDSU instructors use the Blackboard learning management system to communicate with students, post grades, distribute materials, and facilitate learning activities beyond the classroom. Student accounts in Blackboard are automatically created upon enrollment and use the SDSUid to login. Access to courses in Blackboard occurs when instructors make their courses available to students. The Blackboard website is http://blackboard.sdsu.edu.

## Alumni Association

The SDSU Alumni Association is dedicated to connecting SDSU alumni to the university and each other. Membership in the San Diego State University Alumni Association is open to those individuals who have an abiding interest in and commitment to the growth and future of SDSU and the community it serves.

The Alumni Association is a dynamic, exciting organization whose purpose is to serve and support the university and its graduates. It offers a number of programs and services designed to meet the variety of needs and interests of its alumni, including library privileges, reduced admission to many cultural activities and sporting events, discounts on purchases at the Aztec Store, access to SDSU's Career Services for a nominal fee, and a subscription to SDSU Magazine, a monthly electronic newsletter, and Aztec update: publications for alumni and friends of the university.

In addition, the Alumni Association sponsors an annual awards event honoring alumni of the university, provides scholarships for students, organizes Homecoming, provides input regarding university programs and policies, and provides excellent networking opportunities through a myriad of events.

For further information call the Alumni Office at 619-594-2586 or visit http://www.sdsualumni.org.

## Associated Students of

## San Diego State University

Associated Students (A.S.) is a student-directed auxiliary of SDSU and is one of the largest student governance organizations in the CSU system. The auxiliary operates eight facilities, in addition to offering a multitude of programs and services that serve students, faculty, staff, and the SDSU community. Associated Students can be reached by calling 619-594-6555 or visiting http:// www.as.sdsu.edu.

Student Government. There are many leadership opportunities through the Associated Students. Government Affairs is the representative voice for all SDSU students. Student government leaders ensure that the interests of SDSU students are heard, served, and met. The A.S. student leaders also serve as the board of directors for the A.S. Students who want to get involved are encouraged to visit the A.S. office in person or online to learn about available opportunities. For more information, call 619-594-6555 or visit http://www.as.sdsu.edu/govt. The A.S. office is located on the third floor of the Conrad Prebys Aztec Student Union.

Conrad Prebys Aztec Student Union. The Conrad Prebys Aztec Student Union is the first LEED (Leadership in Energy and Environmental Design) Double Platinum certified student union in the CSU and features numerous sustainable "green" building
elements. The student union provides a vibrant and welcoming space for students through a variety of programs and services. Amenities include ARC Express (fitness center), Aztec Lanes (bowling and games center), the Backdoor Media Studio, Cal Coast Credit Union, Center for Intercultural Relations, dining options, free events for SDSU students, information center, Jeffrey W. Glazer Center for Leadership and Service, meeting spaces, student lounge, Student Organization Center, a 300-seat theatre, 11,500-square-foot multipurpose Montezuma Hall, and plenty of indoor and outdoor seating. To learn more about the Conrad Prebys Aztec Student Union or to get involved with the Aztec Student Union Board (ASUB), visit http://aztecstudentunion. com. To inquire about meeting space, call Union Programs and Services at 619-594-5278 or e-mail asmtgsvs@sdsu.edu. For general information, call 619-594-6551.

SDSU Children's Center. The SDSU Children's Center, a quality service of Associated Students, provides an educational childcare program for children between six months and pre-kindergarten to five years of age. Priority for enrollment starts with SDSU students, followed by children and grandchildren of faculty and staff, and then children of SDSU alumni and the larger community as space is available. The center serves as the laboratory school for the Department of Child and Family Development in the College of Education. In addition, the center collaborates with campus departments to support academic research, observational learning and opportunities to link academic coursework with hands-on learning by working directly with children and families at the center. For more information, call 619-594-7941, e-mail ccc_info@ sdsu.edu, or visit https://childcare.sdsu.edu.

Cal Coast Credit Union Open Air Theatre. Located amidst the original landscaping of San Diego State University, this historic venue is ideal for watching your favorite musical group while sitting under the stars. Built in 1934, this 4,800-seat amphitheatre has played host to sold out concerts, lectures, symphonic performances, and university events. Generations of guests have enjoyed this theatre's natural acoustics which complement the sound of all music genres. For event information, call 619-5940234 or visit http://calcoastopenairtheatre.com.

Viejas Arena. Home to SDSU men's and women's basketball, Viejas Arena is San Diego's premier venue for everything from concerts to sporting events, family shows, conventions, conferences, and corporate and university events. This state-of-the-art, 12,000 -seat facility is complete with award-winning acoustics and a distinctive outdoor concourse area. Viejas Arena features a full-service ticket office and TicketMaster location for events throughout California. Viejas Arena is adjacent to the Aztec Recreation Center in the heart of the SDSU campus with nearby parking. Call 619-594-0234 or visit http://www.viejasarena.com for more information.

Aztec Recreation. Aztec Recreation, a department of Associated Students, provides high quality programs, services and facilities that inspire active, healthy living and enhance the SDSU experience. Aztec Recreation manages seven on-campus facilities: Aztec Recreation Center (ARC), ARC Express, Aztec Aquaplex, ENS 700 Field, SDSU Recreation Field, tennis, and racquetball as well as the Mission Bay Aquatic Center (MBAC), an off campus water sports facility. Aztec Recreation membership provides access to a wide range of services and facilities, including the ARC, ARC Express, Aztec Aquaplex, Aztec Lanes bowling, group fitness classes, intramural sports programs, indoor climbing, racquetball, and tennis (https://arc.sdsu.edu).

Aztec Recreation Center (ARC). The ARC is a fitness and recreation facility with a climbing wall, gymnasiums for basketball and volleyball, as well as spaces for cardio, group exercise, and weight training (https://arc.sdsu.edu/arc/).

Aztec Adventures. Aztec Adventures offers leadership development, education and adventure experiences through outings, team building, ENS credit classes, and climbing programs (https://aztecadventures.sdsu.edu/).

Aztec Aquaplex. The Aquaplex is an outdoor aquatics and tennis facility located on the west side of campus with two large pools, a spa and 12 tennis courts. The facility is available for open recreational play and is home to numerous Sport Club and Aztec Athletics teams (https://arc.sdsu.edu/aquaplex/).

ARC Express. The ARC Express is a 6,000-square-foot fitness center located on the third floor of the Conrad Prebys Aztec Student Union (https://arc.sdsu.edu/arcexpress/).

Aztec Lanes. Aztec Lanes is the SDSU bowling and games center located on the first floor of the Conrad Prebys Aztec Student Union. Featuring 12 bowling lanes, the facility also offers participants a lounge with billiards, table tennis and big-screen TVs (https://arc.sdsu.edu/azteclanes/).

ENS Credit Classes. Aztec Recreation partners with the SDSU Department of Exercise and Nutritional Sciences to provide one unit courses that promote lifelong fitness, wellness and recreational pursuits. Classes are available in dance, fitness, martial arts, mind/body, outdoor skills, sports, and water sports (https://arc.sdsu.edu/creditclasses/).

Group Fitness. Group fitness classes are drop-in classes led by motivating instructors who engage participants in effective, fun, and safe fitness training in cardio, dance, mind/body, and strength-based formats (https://arc.sdsu.edu/groupfitness/).

Intramural Sports. Intramural sports has opportunities to compete in a variety of team and individual sports through league, tournament and special event formats throughout the year (https://arc.sdsu.edu/intramurals/).

Mission Bay Aquatic Center (MBAC). The world-renowned Mission Bay Aquatic Center is Aztec Recreation's beachside instructional facility offering rentals, special events, and water sports classes. Every semester, hundreds of students earn university credit while learning to kayak, row, sail, stand up paddle, surf, wakeboard, wakesurf, or windsurf (http://www.mbaquaticcenter.com).

Recreation and ENS Fields. The Recreation and ENS fields feature state-of-the-art turf and lighting systems. The fields host recreational sports activities including daily open recreational play as well as credit classes, fitness, intramural sports and sport club games and practices (https://arc.sdsu.edu/).

Recreational Sports. Recreational sports offers an Olympic lifting facility, racquetball courts, and a small mat room for martial arts classes.

Sport Clubs. The SDSU Sport Club program consists of 21 diverse and competitive collegiate teams with over 800 athletes. Sport Club teams represent SDSU in intercollegiate competitions at regional, state, and national levels and recruit both new and experienced student athletes (https://arc.sdsu.edu/ sportclubs/).

## Athletics

San Diego State University sponsors a broad array of varsity intercollegiate athletics for women and men. SDSU's commitment to gender equity in athletics includes 13 sports for women (basketball, cross country, golf, lacrosse, rowing, soccer, softball, swimming, tennis, indoor/ outdoor track and field, volleyball, and water polo) and six for men (baseball, basketball, football, golf, soccer, and tennis). As a National Collegiate Athletic Association (NCAA) Division I program, Aztec athletic teams compete at the highest level of intercollegiate competition. All of the teams except lacrosse, men's soccer, rowing, and water polo compete in the 11-member Mountain West Conference. Lacrosse is a member of the Mountain Pacific Sports Federation (MPSF); men's soccer is a member of the Pac12 Conference; rowing is a member of the American Athletic Conference; and water polo is a member of the Golden Coast Conference.

Athletics serves a number of important roles on campus and within the larger San Diego community. In addition to encouraging student athletes to expand their competitive capabilities to the fullest, San Diego State teams provide a catalyst which helps generate pride and a shared esprit de corps among students, faculty, staff, and alumni. This also helps link these groups from generation to generation. Similarly, with nearly a 100,000 alumni and former students and tens of thousands of supporters in the county with no other direct connection to the university, Aztec
of NCAA Division I Athletics. On-campus athletic events attract both students and members of the community to campus and this reinforces many mutually beneficial town-gown relationships. For more information, please call 619-594-3019 or visit http://www. goaztecs.com.

## Student Athlete Support Services

## Aztec Athletics Center, Room 3029

619-594-3395
Involvement with intercollegiate athletics on campus presents many challenges for students. This office provides guidance and assistance for these student-athletes in the areas of admission, registration, new student orientation, counseling, study hall, mentoring, tutoring, and academic advising. The office also serves as a liaison between faculty and the Athletic Department. This individualized program is designed to create an academic support network to ensure all student-athletes comply with university requirements while working toward completion of a degree.

## Audiology Clinic and <br> Speech-Language Clinic

Administered by the School of Speech, Language, and Hearing Sciences, the clinics provide assessment and remediation services for SDSU students, staff, faculty, and the community. In addition, the clinics offer opportunities for research, consultation, supervised field internships, continuing education, and other service activities.

In the Speech-Language clinic, comprehensive diagnostic and treatment programs are available for children and adults in the areas of aphasia, cerebral palsy, cleft palate, delayed speech/ language development, fluency or articulation disorders, hearing loss, loss of communication function, and voice. Services are also provided for bilingual/multicultural clients and speakers of English as a second language.

The Assistive Device Assessment Program provides language, cognitive, and technical assessments related to augmentative/ assistive devices and systems for individuals who have communication disabilities.

In the Audiology Clinic, audiologic services for children and adults include hearing assessment, hearing aid evaluation and selection, assistive listening device evaluations, earmolds, hearing protection devices, hearing conservation services, and aural rehabilitation therapy.

The clinics are located at 5245 Campanile Drive, San Diego, CA 92182-1518 and can be reached at 619-594-7747.

## Aztec Shops, Ltd.

## (Campus Stores, Dining)

http://www.aztecshops.com
Aztec Shops, Ltd., founded in 1931, is a not-for-profit corporation that functions primarily as an auxiliary of San Diego State University. The corporation provides a diverse portfolio of commercial services including operation of the bookstore and dining on campus. Aztec Shops also operates selected other enterprises at SDSU. The corporation employs close to 150 full-time professionals and up to 825 part-time employees - mainly students - during the busiest times.

## Campus Stores

SDSU Bookstore. The flagship of Aztec Shops' retail operations, the SDSU Bookstore is one of the largest campus bookstores in the country. The 25,000 square-foot-facility - located in the heart of campus - carries required and optional textbooks used in courses taught at SDSU. Textbooks are available to purchase or rent and many titles are available digitally. The bookstore's aztecnology department offers academic discounts on Apple and PC products. Aztecnology offers a wide array of services including hardware financing, a hardware trade-in program, and a free gaming center.

The SDSU Bookstore features an extensive selection of SDSU-licensed clothing and gifts, greeting cards, fiction and non-fiction books, gifts for the home, clothing in the latest trends, school supplies, and is the official stop for regalia needs. For more information, call 619-594-7525 or visit http://www.shopaztecs. com.

The Aztec Store. Aztec Shops operates The Campus Store, the bookstore at the SDSU branch campus in Calexico, CA.

Montezuma Publishing. As part of its commitment to providing course materials for SDSU and other colleges and universities, Montezuma Publishing prepares customized course materials and readers, securing copyright permissions when necessary, in printed or digital formats.

## Dining Services

SDSU Dining. SDSU Dining has been providing quality food service for the SDSU campus since 1959. Dining proudly features over 48 restaurants and food service outlets on campus, including Faculty-Staff Club, Farmers' Market, Garden at Cuicacalli Suites, Juice It Up, Salad Bistro, SoCal Chicken, University Towers Kitchen (UTK), Vinnie's, eight Aztec Market convenience stores, and three Starbucks locations campuswide. For more information on SDSU Dining, call 619-594-7640 or visit http://www.eatatsdsu. com.

Concessions. Aztec Shops operates the concession stands at Aztrack, Cal Coast Credit Union Open Air Theatre, Peterson Gymnasium, Tony Gwynn Stadium, and Viejas Arena.

SDSU Catering. SDSU Catering is the recognized caterer for all events on the SDSU campus.

## Other Aztec Shops Operations

Conference Services. Aztec Shops manages Conference Services, which offers athletics facilities, food and beverage, housing, and meeting spaces to groups interested in hosting their athletic camps, conferences, events, or meetings at SDSU for groups of all sizes and age ranges.

University Towers. In November 2000, Aztec Shops purchased the well-known El Conquistador residence hall near the SDSU campus. Renamed University Towers, the facility is home to more than 500 students during the academic year.

## California State University Program for Education and Research in Biotechnology (CSUPERB)

Susan Baxter, Executive Director
Created in 1987 as a system-wide program, the California State University Program for Education and Research in Biotechnology (CSUPERB) funds student scholarships, partners with the life science industry, and supports collaborative CSU student and faculty bio-entrepreneurship projects and research. CSUPERB also organizes the annual CSU Biotechnology Symposium and hosts the NSF-funded CSU I-Corps entrepreneurship education program, where students can meet and talk with alumni and professionals in the biotechnology industry.

The CSUPERB program office is hosted at San Diego State University but serves and supports faculty and students at all 23 CSU campuses. The program involves more than 700 students and faculty from agriculture, business and computer science departments, clinical sciences, engineering, life sciences, mathematics, and physical sciences annually.

CSUPERB knows that successful biotechnology students have opportunities to integrate coursework, hands-on practice, and participation in interdisciplinary entrepreneurship or team-based research projects. CSUPERB's competitive award, scholarship, and seed grant programs include Crellin Pauling Student Teaching Awards, CSU I-Corps program, Don Eden Graduate Student Research Award, Glenn Nagel Undergraduate Research Award, Howell-CSUPERB Research Scholars Awards, Presidents Commission Scholar Awards, and student travel grant programs. In total, CSUPERB programs award over \$800,000 to CSU faculty and students annually.

Visit the program websites at http://www.calstate.edu/csuperb and http://www.csuperb.org/csuicorps for more information.

## Center for Supplemental Instruction

Emily A. Bates, Coordinator
Supplemental Instruction (SI) provides students in high-challenge courses with additional voluntary and non-remedial study sessions focused on active learning strategies. Since SI's implementation at SDSU in 2015, SI-participating students have typically averaged a half to full letter grade higher examination performance compared to non-SI-participating students. SI sessions are facilitated by undergraduate students who successfully completed the course and trained as SI leaders. Since SI focuses on high-challenge courses rather than at-risk students, SI participants range from those excelling in the course to students who may be struggling. SI sessions are offered throughout the week to maximize student access.

Information about Supplemental Instruction, courses, and session schedules may be found at https://its.sdsu.edu/sup-plemental-instruction or by contacting the SI coordinator at 619-594-2205.

## Honors Council

The Honors Council was formed in 1989. It comprises representatives of the Weber Honors College and of Phi Eta Sigma, Tau Sigma, Phi Beta Delta (formerly Scholars Without Borders), Golden Key, Phi Kappa Phi, Mortar Board, and Phi Beta Kappa interdisciplinary honor societies.

The purposes of the Honors Council are:

- To act as an advisory and coordinating resource center for the interdisciplinary honor societies on campus;
- To promote the specific interests of the above listed honor societies;
- To promote the common concerns of all honor societies and honors college at San Diego State University;
- To cooperate with the faculty and administrative officers in developing and maintaining high academic standards;
- To recognize students and faculty for their achievements in scholarship, leadership, and service;
- To recognize graduating seniors who are active members of all five university-wide honor societies.
For meetings and events and to house honors insignia and regalia, the Honors Council has the Henry L. Janssen Honors Council Room in Library and Information Access, Love Library, Room 428D.


## Honor Societies

An academic honor society is a campus organization that values and reinforces the high academic standards of the university and selects its members, at least in part, on the basis of superior academic performance.

## Multidisciplinary Academic Honor Societies

Golden Key is a national and worldwide undergraduate honor society whose purpose is to recognize and encourage scholastic achievement, and excellence in all undergraduate fields of study, to unite with collegiate faculties and administrators in developing and maintaining high standards of education, to provide economic assistance to outstanding members by means of annual scholarships, and to promote scholastic achievement and altruistic conduct through voluntary service. Golden Key International Honour Society has over 300 active chapters. It also publishes an annual magazine and a regular newsletter. San Diego State University's chapter was chartered in 1984.

Each year, the chapter invites to membership sophomores, juniors, and seniors in the upper 15 percent of their class (roughly a 3.49 GPA) and graduate students (roughly a 3.95 GPA) whose last 24 units have been earned at SDSU. Elected student officers set all agendas and direct activities. The faculty adviser is Dr. Norah P. Shultz, Associate Vice President for Academic Affairs, Student Achievement, nshultz@sdsu.edu. For more information, visit their website at http://sdsu.goldenkey.org.

Mortar Board, a national honor society for college seniors, was founded in 1918. The society recognizes in its membership the qualities of superior scholastic ability, outstanding and continual leadership, and dedicated service to the university community. The SDSU chapter of Mortar Board had its beginning in 1932 as Cap and Gown. In 1965 the local honorary was recognized as a member of the national organization. Nationwide there are over 230 active chapters with a membership in excess of 240,000 . In 2009, the chapter was renamed the Jane K. Smith Cap and Gown Chapter, in recognition of the pivotal role Dr. Smith has played in the development of the SDSU chapter. At the 2003 and 2012 National Conferences, the SDSU chapter received the Ruth Weimer Mount Award as the most outstanding chapter in the nation. Each year, the chapter receives the Golden Torch award for its excellence in supporting the ideals of Mortar Board.

Mortar Board membership means active involvement to benefit the campus and community. Current projects include an annual faculty/staff appreciation dinner, awarding of scholarships, sale of the Mortar Board Daily Planner and Calendar of Events, support of activities and projects of the San Diego Alumni Chapter, and support of philanthropy projects related to literacy. To be considered for election to membership, students must have senior standing for the fall semester with an overall GPA of 3.2 or better and must have participated and excelled in the areas of scholarship, service, and leadership. All prospective members must be making satisfactory progress toward the degree. Admission to Mortar Board is highly competitive and is restricted to no more than 45 students per year.

Advisers for the honor society are Dr. Jane K. Smith, Assistant Vice President Emerita for Academic Services; Cassandra Conboy Neel, Department of Linguistics and Asian/Middle Eastern Languages; and Randi E. McKenzie, Assistant Dean Emerita for Student Affairs, College of Professional Studies and Fine Arts.

Information is available at http://mortarboard.sdsu.edu.
Phi Beta Delta (formerly Scholars without Borders) officially launched during the 2019-2020 academic year. Phi Beta Delta was the first honor society to recognize the scholarly achievements in international education, giving scholarships to deserving students, and enhancing knowledge about various cultures around the world. Their motto is "Scientia Mutua Mundi," which means "World's Shared Knowledge." The goal is to promote international exchange and service and to recognize the scholarly achievements of SDSU students, faculty, and staff. As a fellowship of international scholars, the honor society supports programs with an international focus and builds campus awareness of international issues and opportunities. Students interested in an international perspective who have demonstrated high scholastic achievement are invited to join.

The adviser is Dr. Virginia Loh-Hagan, Director of the Liberal Studies program, vloh-hagan@sdsu.edu.

Phi Beta Kappa, founded in 1776, is the oldest academic honor society in America. Its 286 chapters recognize academic excellence in the liberal arts and sciences. In 1974, Nu of California Chapter was established at SDSU, the first CSU campus to be so honored.

Students do not apply for membership in Phi Beta Kappa; rather, seniors and juniors are "elected" each spring by resident faculty. This invitation to membership is extended only once and must be accepted in the semester of election and initiation. Candidates for Members in Course shall have completed a balanced range of coursework in the liberal arts and sciences, 90 percent of which shall be letter graded; for juniors this means at least 75 units and for seniors 90 units. These units shall include 45 units at San Diego State University, one semester of advanced mathematics, and proficiency in a foreign language corresponding to a third-semester university course. Juniors shall have attained at least a 3.75 grade point average both overall and in the liberal arts and sciences. Seniors shall have a 3.60 grade point average both overall and in the liberal arts and sciences and shall have completed the Graduation Writing Assessment Requirement. All
candidates shall show depth and breadth of scholarly interests by the number, variety, and rigor of upper division courses taken outside the major.

Chapter activities include the annual initiation, at which several scholarships are awarded; the annual Phi Beta Kappa Faculty Lecture honoring a worthy SDSU professor; lectures by visiting scholars; participation on the University Honors Council; and supportive interaction with local schools. Chapter president is Dr. Kathy S. Williams, Professor Emerita of Biology, kathy.williams@sdsu.edu. Corresponding secretary is Dr. Carey G. Wall, Professor Emerita of English, wall@sdsu.edu. For general information consult http:// www.pbk.org.

Phi Eta Sigma is a national freshman honor society. The national chapter was formed in 1923; the local chapter was formed in 1955.

Phi Eta Sigma was established to encourage and reward high scholastic achievement among freshmen in institutions of higher education. There are over 350 chapters throughout the United States and more than 500,000 members.

All freshmen, both men and women, who have a cumulative grade point average of at least 3.50 on a 4.0 scale with at least 12 units at the close of either semester during their freshman year at SDSU are eligible to join. Students who were eligible but missed induction after their freshman year may join retroactively only during the designated invitation period in the month of September.

Among its activities are induction ceremonies, community service involvement, social events, and national conventions.

Adviser for the honor society is Dr. Charles E. Goehring, Assistant Professor of Communication, cgoehring@sdsu.edu.

Phi Kappa Phi was founded in 1897 to promote the pursuit of excellence in all fields of higher education and to recognize outstanding achievement by students, faculty, and others through election to membership and through various awards for distinguished achievement. Activities of the organization include the awarding of two scholarships annually for graduate education of outstanding students, the recognition of outstanding faculty and students through nominations for national awards and scholarships, and spring initiation. Additionally, the local chapter co-sponsors lectures, symposia, and workshops across the campus, most notably the Common Experience and the annual Student Research Symposium.

The national organization publishes a newsletter and a scholarly journal and sponsors the National Scholar and National Artist awards and the Graduate Fellowship program. The society offers literacy grants, study abroad grants, emerging scholar awards, and love of learning awards. Many of these awards are open to all students at campuses with a Phi Kappa Phi chapter, including the Study Abroad Grants.

Nationally there are almost 300 active chapters. San Diego State University's chapter was chartered in 1965. Membership is based on, but not limited to, the following criteria: Juniors must have completed a minimum of 75 units and be in the top 7-1/2 percent of their class at SDSU; seniors must have completed a minimum of 90 units and be in the top 10 percent of their class at SDSU; graduate students must have completed a minimum of 15 units of graduate work at SDSU and be in the top 10 percent of their class. All prospective members must have made satisfactory progress toward the degree.

The adviser is Michelle Lopez, Assistant Dean, Division of Academic Engagement and Student Achievement, mlopez@sdsu. edu. For more information, contact sdsupkp@sdsu.edu.

Tau Sigma is a national honor society designed exclusively for SDSU transfer students. Their mission is to recognize and promote the academic excellence of SDSU transfer students. Transfer students in the top 20 percent across campus and who complete one full-time SDSU semester (12 or more units) will be invited to join. Tau Sigma replaces Phi Eta Sigma for consideration for the Dr. Henry L. Janssen Honors Council Award.

The adviser is Michelle Lopez, Assistant Dean, Division of Academic Engagement and Student Achievement, mlopez@sdsu. edu.

## Discipline-Based Honor Societies

The national honor societies at San Diego State University which accord recognition to students who demonstrate superior scholarship and leadership in specific academic fields include:

## Alpha Kappa Delta (Sociology)

Alpha Phi Sigma (Criminal Justice)
Beta Alpha Psi (Accounting)
Beta Gamma Sigma (Business)
Chi Epsilon (Civil, Construction, and
Environmental Engineering)
Eta Kappa Nu (Electrical and Computer Engineering)
Eta Sigma Phi (Classics)
Kappa Delta Pi (Education)
Lambda Pi Eta (Communication)
Omicron Delta Epsilon (Economics)
Phi Alpha Theta (History)
Phi Mu Alpha Sinfonia (Music)
Pi Alpha Alpha (Public Affairs and Administration)
Pi Kappa Lambda (Music)
Pi Sigma Alpha (Political Science)
Psi Chi (Psychology)
Sigma Tau Delta (English)
Sigma Theta Tau (Nursing)
Tau Beta Pi (Engineering)

## Instructional Technology Services

Located on the first floor of Adams Humanities, Instructional Technology Services (ITS) provides support and leadership to the university in the effective uses of technologies for enhancing learning, facilitating research, and supporting strategic initiatives. ITS fulfills its mission by fostering collaboration and innovation with faculty and university stakeholders in the design, development, and effective use of learning environments and educational media.

ITS supports the following resources and training, available to all faculty, year-round:

- Academic integrity software, technologies, and assessment strategies (e.g., Respondus LockDown Browser, Turnitin, ParScore scanners);
- Academic Media Services (e.g., instruction-based video production, photography, graphic design);
- Blackboard Learning Management System support;
- Course capture technologies (classroom-based, online, and/ or mobile);
- Instructional Design (individual consultation, small group, or workshop settings);
- Instructional equipment loans (e.g., laptops, video/data projectors, 360 degree cameras, Google Cardboard, and VR headsets);
- Student response system hardware, strategies, and training (e.g., iClicker, Reef);
- Universal Design for Learning (UDL) accessibility consultation, software, and support;
- Virtual, immersive, and augmented reality training and technologies;
- Web-based conference system support for virtual instruction, office hours, and meetings.
ITS supports the Faculty Instructional Facility (FIT) Center, located in Adams Humanities, Room 1109. The FIT Center provides an informal environment for faculty consultations, collaboration, and development of instructional, professional, and research materials. There are five ITS Learning Research Studios, each offering different functionality and educational technology support.

The Learning Glass Studio, located in Student Services West, Room 2667, allows instructors to write lecture notes while maintaining face-to-face contact with students; the images are flipped so students can view notes as they are written, through a monitor.

The Virtual Immersive Teaching and Learning (VITaL) Space, located in Adams Humanities, Room 1120, offers a variety of augmented and virtual reality tools in a flexible learning environment. Promoting experimentation with curriculum design and the
scholarship of teaching and learning, VITaL serves as an incubator to enable experiences that would be impossible or out of reach in a traditional learning environment.

Multi-Display Studios, located in Adams Humanities, Room 1112, Education and Business Administration, Room 410, and Student Services West, Room 2649, offer 8 to 10 video displays for faculty to share overhead camera feeds and/or web-based content from the SMART Board or computer. Similarly, students can plug in from each of the learning hubs throughout the rooms to broadcast their content at the local hub or to the entire classroom.
For more information about ITS services and support, call 619-594-4357 (4-HELP) or go to http://its.sdsu.edu.

Instructional Services on the Calexico campus can be accessed by calling 760-768-5545 or going to East Faculty, Room 124C. On the Brawley campus, faculty members need to check with the coordinator who can be reached by calling 760-768-5787 or by going to the Administrative Office, Room 122.

## Smart Classrooms

For instruction using technologies, smart classrooms provide user-friendly, technology-rich equipment, and presentation systems. Each classroom system includes a fixed podium, enabling faculty to instruct using the following:

- DVD or Blu-ray disc players;
- Mac and/or Windows computers;
- Laptop or tablet computers;
- Visual presenters/document cameras for projection of print and three-dimensional materials.
Projection is achieved via LCD video/data projector or largescreen, high-definition televisions. In larger lecture halls, a public address system with wireless microphone unit and assistive listening device are included.

Today, approximately 98 percent of the teaching spaces on campus are considered smart classrooms. Requests for smart classrooms should be made through your department or school administrative coordinator.

## Office of International Programs

The Office of International Programs has responsibility for coordinating and facilitating the development of the diverse international programs and activities of the university. The Office of International Programs is the primary contact for international programs and represents the university on international matters to external agencies and institutions. The office coordinates all international faculty and student programs and serves as an information clearinghouse regarding international projects, funding opportunities, and academic programs and services that have an international component.

## International Faculty Exchanges

In order to enhance the international character of instruction and research and to support efforts to become a global university, SDSU has a continuing program of faculty exchanges with partner universities worldwide. Over 150 international scholars visit the San Diego State University campus each year to pursue scholarly research, participate in academic or professional programs, and share their international perspectives with the university community.

## Lavin Entrepreneur Program

The Lavin Entrepreneur Program is a two year, progressive, co-curricular program offered through the Fowler College of Business with the Department of Management and the Lavin Entrepreneurship Center. The program offers students the opportunity to explore entrepreneurial issues in local, regional, and global environments. Students enroll in a one-unit seminar each semester. The seminars are a blend of academic material and experiential activities designed to prepare students for entrepreneurially oriented career paths. Students participate in activities to promote academic and personal growth and in networking and social events designed to build confidence in entrepreneurial competencies and enhance social and professional networks. Students are accepted into the Lavin Entrepreneur Program before their junior year. The program is open to all majors at SDSU.

## Marine Officer Programs

The Marine Officer Selection Office in San Diego is looking for qualified students interested in a career as a commissioned officer in the United States Marine Corps. Positions are available in aviation, ground, and law; aviation and law programs may be guaranteed prior to commissioning. Contact the officer selection officer at 619-294-2174 or visit http://marineofficer.com for more information.

Platoon Leaders Class. The Platoon Leaders Class is the most popular route to becoming an officer. For college freshmen and sophomores, the program consists of two six-week training sessions between school years at Officer Candidates School in Quantico, Virginia. For college juniors, it is one 10-week training session during the summer prior to the senior year. Students are paid and travel costs to and from Quantico, meals, textbooks, materials, and clothing are furnished. During the school year, students will not be called to active duty and are not required to wear a uniform. Upon graduation, the student will be commissioned as a Marine Second Lieutenant and advance directly to The Basic School.

Officer Candidates Course. College graduates who want to be officers in the Marine Corps go through one 10 -week session at Officer Candidates School. Upon completion, students will move immediately to The Basic School. There are three sessions during the year: fall, winter, and summer. Whatever session is selected, students will be paid and travel costs to and from Quantico will be covered. Meals, textbooks, materials, and clothing for training are also furnished.

Officer Candidates Course-Reserve. Officer Candidates Course-Reserve is similar to Officer Candidates Course, except candidates pursue a reserve commission. College graduates attend the 10-week session at Officer Candidates School, attend The Basic School, and after completing military occupational school, report into their reserve unit. Applicants competing for these positions select their military job and reserve unit prior to attending Officer Candidates School.

Students are encouraged to seek information and plan ahead if they are interested in pursuing a commission in the United States Marine Corps.

## Navy Officer Programs and Scholarships

San Diego State University maintains a liaison with the Navy Officer Programs Office in San Diego. This liaison provides students with access to the many opportunities available to college students throughout the Navy, including scholarships for up to \$42,000. Call 1-800-USA-NAVY for additional information.

Baccalaureate Degree Completion Program. Sophomores, juniors and seniors who qualify can earn up to $\$ 1,800$ each month while they finish their last one, two or three years of college - no uniforms or drill required. Scholarships are available to sophomores, juniors and seniors in all majors who have a 2.7 grade point average or above. Positions in aviation, surface warfare, business management, personnel management, and information systems are guaranteed after college graduation.

Navy Engineering Programs. Scholarships are available to students in technical majors who have at least a 3.0 grade point average. Those who are interested and qualified receive more than $\$ 1,700$ each month plus benefits while they finish their last one or two years of undergraduate study. The scholarship leads to a position as an instructor, research or operating engineer for the Navy, and a commission as a naval officer.

Medical School and Dental School Scholarships. For students applying to medical or dental school, a scholarship is available which will cover the cost of tuition and books and provide a monthly payment while in medical school. Initial requirements are application to an accredited medical school and competitive GPA and MCAT/DAT scores.

Allied Health Profession Opportunities. The Navy Medical Service Corps offers commissions to clinical, scientific and administrative professionals in the health care field. It is comprised of several specialties that require either a baccalaureate, masters or doctorate degree.

Nurse Corps. Limited scholarships are available for junior and senior nursing students with top scholastic performance.

Students are encouraged to seek information and plan ahead if they are interested in adding any of these programs to their career options. More information on all programs is available by calling or writing to the Officer Programs Office, NRD San Diego, ASW Base, Bldg. 2, 33055 Nixie Way, San Diego, CA 92147-5192, 619-524-6760.

## Parking and Transportation

When possible, carpooling or use of alternate modes of transportation is recommended for the commute to campus.

Metropolitan Transit System's Green Line trolley and seven bus routes (11, 14, 115, 215, $856,936,955$ ) conveniently connect the San Diego metropolitan area with service to the San Diego State University Trolley Station and Transit Center. Monthly and semester student trolley and bus passes can be purchased at the Viejas Arena Ticket Office.

Further information concerning Metropolitan Transit trolley and bus routes, fares, and services can be found at https://www. sdmts.com. SDSU partners with Zipcar and Zimride for car sharing and carpool services in addition to the city's iCommute and Waze Carpool programs. For more information, visit http://www. zipcar.com/universities/san-diego-state-university, http://www. zimride.com/sdsu, http://www.icommutesd.com, and http://waze. com/carpool.

On-campus parking is by payment only and overnight parking requires a day/night use payment. Purchase of parking does not guarantee parking. Parking is limited and available on a first come, first serve basis and is located on the perimeter of the campus. Major events at Viejas Arena may require parking location adjustment.

Visitors are directed to the Parking Information Booth at the College Avenue entrance to the campus for directions to several available pay parking lots. Look for PayByPhone signage at select locations to use this phone app in lieu of a pay station. Permits may be purchased ahead of time at https://aztecs.t2hosted.com. For further information on parking at the San Diego campus, contact Parking and Transportation Services, 619-594-6671. For visitor parking at SDSU Imperial Valley, call 760-768-5500.

## San Diego State University Research Foundation

Incorporated in 1943, San Diego State University Research Foundation is an auxiliary organization authorized by the Education Code of the State of California. It is a nonprofit corporation chartered to augment the educational, research, and community services objectives of the university. SDSU Research Foundation serves the university in the following major areas:

- Assisting faculty and staff in developing and administering federal, state, and privately funded projects.
- Seeking funding sources, offering grant-related workshops, assisting with proposal development and submission, and interpreting agency guidelines and policies.
- Developing project budgets, obtaining university approvals, and negotiating sponsored grant and contract awards.
- Assisting with staff recruitment, and purchasing support for funded projects.
- Providing technology transfer services, protecting intellectual property, commercializing technology developed at the university, and assisting spin-out companies based on SDSU inventions.
- Identifying, acquiring, and managing real property in support of sponsored programs not housed in university facilities.
- Accounting and financial reporting support for research and project funds, scholarships, institutes, and The Campanile Foundation.
SDSU Research Foundation is located in the Gateway Center at 5250 Campanile Drive. More information is available at http:// www.foundation.sdsu.edu or by calling 619-594-1900.


## San Diego State University Press

As an independent scholarly press housed in San Diego State University's College of Arts and Letters, San Diego State University Press publishes works of original research, as well as other dynamic academic and creative works that further the intellectual
mission of the university. Founded in the late 1950s, San Diego State University Press is the oldest university press in the California State University system. Today, SDSU Press is guided by an internal editorial board made up of seven scholars drawn from faculty within SDSU's College of Arts and Letters and an external editorial board of eight scholars from leading universities across the country. San Diego State University Press's various publication programs and imprints include: Amatl Comix, Baja California Literature in Translation, Binational Press/Editorial binacional, Code[x] Books, Hyperbole Books, The Institute for Regional Studies of the Californias, Psychoanalysis on the Couch, and SurText. The current focus of the press is avant-garde aesthetics, art history, contemporary intellectual history, critical theory, cultural studies, ethnic studies, graphic narrative, Latin America and the United States-Mexico border, post-modernism, post-structuralism, and regional studies of the Pacific Rim and the Pacific Southwest. In addition to books, the press also has a journals division that oversees pacificREVIEW: A West Coast Arts Review Annual and Poetry International. San Diego State University Press policy is controlled by its internal editorial board and its director, appointed by the SDSU senate. Financial accounting and coordination are provided by the San Diego State University Research Foundation.

## San Diego State University Mathematics and Statistics Learning Center

The SDSU Mathematics and Statistics Learning Center promotes student success by providing drop-in tutoring for low-er-division mathematics and statistics courses. The atmosphere at the center is welcoming and encourages discussions about mathematics among friends, classmates, teaching assistants, and tutors. The center employs undergraduate and graduate student tutors with backgrounds in a variety of Science, Technology, Engineering, and Mathematics (STEM) disciplines. Teaching assistants from many of the lower-division mathematics and statistics courses hold office hours in the center. Students are encouraged to drop by to work with a knowledgeable tutor, find other classmates who are working on similar assignments, or work in groups in a study room.

Student support is provided through the following:

- Drop in tutoring for help with a variety of mathematics questions;
- Small meeting rooms where students can meet one-on-one with their teaching assistants;
- Weekly workshops that target specific classes such as precalculus, calculus I, and calculus II.
The center is open when classes are in session. Hours and dates of operation, tutor schedules, and instructional video resources are available at http://mlc.sdsu.edu. The center is located in Love Library, Room 328, and can be reached at 619-594-0487.


## San Diego State University Writing Center

The SDSU Writing Center promotes student success with writing across the university. The center works with undergraduate and graduate students from all disciplines to develop and extend knowledge and performance of academic literacies; through coaching from tutors who engage in conversation about writing and broaden understanding of audience, genre, language, and context. The center also works with faculty to promote success in writing instruction, support teaching of writing across the university, conduct research into writing, tutoring, and understanding of the teaching of writing on campus.

Student support is provided through the following:

- One-to-one sessions with tutors to discuss any type of academic writing;
- Workshops to familiarize students with different aspects of writing;
- Classroom visits to explain how students can best make use of the center;
- Reference materials about academic writing.

Faculty support is available through the following:

- Consultation regarding designing writing assignments to help students achieve course learning outcomes;
- Professional development workshops for faculty and graduate teaching assistants.
The center is open when classes are in session. Hours and dates of operation are available at http://writingcenter.sdsu.edu. Information about appointments, workshops, and other services can also be found at the website. The center is located in Love Library, Room 1103, and can be reached at 619-594-3543.


## Study Abroad Programs

San Diego State University offers more than 350 study abroad programs in over 70 countries around the world. These programs range in length and type of program, increasing the possibilities for all students to be able to study abroad. For a complete listing of available study abroad programs, explore Aztecs Abroad at http://www.sdsu.edu/aztecsabroad.

## Military and Veterans Program

The Military and Veterans Program, located in the Joan and Art Barron Veterans Center (JABVC) in Student Services West, Room 1661, is the first veteran's resource center in the California State University system. The center operates as the primary and initial resource for most military-connected services at San Diego State University. Keeping to our motto of "serving those who served," the primary mission of the staff is to assist all military connected students - veteran, active duty, reserve, guard, and military spouses and children - with the following applicable federal and/ or state Department of Veterans Affairs (VA) educational benefits:

- California Department of Veterans Affairs (CDVA) College Fee Waiver for Veterans' Dependents (Cal-Vet Fee Waiver);
- Chapter 30 (Montgomery Gl Bill - Active Duty);
- Chapter 31 (Vocational Rehabilitation and Employment [VR\&E]);
- Chapter 33 (Post-9/11 GI Bill);
- Chapter 35 (Dependents Educational Assistance);
- Chapter 1606 (Montgomery GI Bill - Selected Reserve);
- Marine Gunnery Sergeant John David Fry Scholarship.


## Federal VA Education Benefits

In order to utilize federal VA education benefits (Chapters 30, 31, 33, 35, 1606, 1607, and Fry Scholarship), students must be matriculated at SDSU (admitted into a program of study), applied for admission to a program of study (some restrictions apply), or be a "guest student" from another institution of higher learning (courses from SDSU must be transferrable to the parent school). Additionally, students must ensure the following actions are taken in order to utilize federal VA education benefits:

## Chapter 30

- Provide the JABVC with a signed VA Form 22-1995 the first semester attending SDSU and/or if changing a major.
- Provide the JABVC with a Student Responsibility Agreement every semester after registering for classes. Without this agreement, the VA will not be notified that the student wishes to use benefits.


## Chapter 31

- Ensure the VR\&E counselor provides the JABVC with an up-to-date VA Form 28-1905 indicating the program of study and any specific guidelines.
- Provide the JABVC with a Student Responsibility Agreement every semester after registering for classes. Without this agreement, the VA will not be notified that the student wishes to use benefits.
- Obtain the necessary documentation from the JABVC for books, parking pass, and other approved items after notification from the VA that the term has been certified.


## Chapter 33

- Provide the JABVC with a copy of the Certificate of Eligibility in order to have tuition and fees deferred. Without this document, students may be required to pay tuition and fees before registering for classes.
- Provide the JABVC with a signed VA Form 22-1995 the first semester attending SDSU and/or if changing a major.
- Provide the JABVC with a Student Responsibility Agreement every semester after registering for classes. Without this agreement, the VA will not be notified that the student wishes to use benefits.
Chapter 35 (Dependents Educational Assistance)
- Provide the JABVC with a signed VA Form 22-5495 the first semester attending SDSU and/or if changing a major.
- Provide the JABVC with a Student Responsibility Agreement every semester after registering for classes. Without this agreement, the VA will not be notified that the student wishes to use benefits.
- Additionally, the VA Claim Number (with assigned suffix) must be indicated on the Student Responsibility Agreement.
Chapter 1606 (Montgomery GI Bill - Selected Reserve)
- Provide the JABVC with a signed VA Form 22-1995 the first semester attending SDSU and/or if changing a major.
- Provide the JABVC with a Student Responsibility Agreement every semester after registering for classes. Without this agreement, the VA will not be notified that the student wishes to use benefits.
Marine Gunnery Sergeant John David Fry Scholarship
- Provide the JABVC with a copy of the Certificate of Eligibility in order to have tuition and fees deferred. Without this document, students may be required to pay tuition and fees before registering for classes.
- Provide the JABVC with a signed VA Form 22-1995 the first semester attending SDSU and/or if changing a major.
- Provide the JABVC with a Student Responsibility Agreement every semester after registering for classes. Without this agreement, the VA will not be notified that the student wishes to use benefits.
Additionally, the following conditions to the usage of federal VA education benefits apply:
- All classes must be required for the degree objective and must not have previously been successfully completed. Refer to your degree evaluation, graduate program of study, graduate student worksheet, SDSU Academic Advising Center, and/or your department adviser to ensure all classes are applicable towards your degree objective. Deviations from the required classes must be approved by an individual authorized to make substitutions (i.e. department adviser, department chair, dean, etc.).
- Federal law requires any changes in enrollment status that may affect VA education benefits be reported. Any changes to your class schedule (i.e. adds/drops) may have an impact on your VA education benefits. If you change your schedule, notify the JABVC as soon as possible to avoid possible retroactive loss of benefits. Unauthorized withdrawal from courses may result in retroactive loss of benefits and a potential debt to the VA and/or university.
- Students placed on academic probation may continue to utilize VA education benefits for not more than two semesters. If the academic probation is carried into a third semester, the student will not be certified for VA benefits. Students that are on or facing academic probation should contact the JABVC for possible resources to improve their academic progress.
- If you change your major, you must provide the JABVC with a signed copy of VA Form 22-1995 (VA Form 22-5495 for Ch. 35). If you add a second major or more than one minor, you will need to provide the JABVC with a copy of your degree evaluation from the Office of Advising and Evaluations. Request this early as it can take several weeks to a few months for it to be generated.
- If you are not rated at $100 \%$ under Chapter 33 (Post-9/11 GI Bill), your portion of tuition and fees must be paid by the schedule adjustment deadline each semester. If you pay tuition and fees that are covered by the GI Bill, your refund will be processed in accordance with SDSU policy and will be refunded after payment is received by the university from the VA.
- To avoid possible overpayment by the VA and additional unexpected costs to the student, all VA benefit users (especially Post $9 / 11 \mathrm{GI}$ Bill [Ch. 33]) are encouraged to keep track of their remaining entitlement. This information is sent each semester to the student by the VA and can be obtained from http://www.ebenefits.va.gov or by calling 888-442-4551.
- The Post-9/11 GI Bill will pay in-state tuition (up to the percentage at which the student is rated), provide a book stipend of approximately $\$ 42 /$ unit (capped at $\$ 1,000$ per academic year), and provide a housing stipend based on the SDSU zip code and calculated at the E-5 with dependents rate established by the Department of Defense.
- Federal law requires the VA to be the last payer for tuition and fees. Chapter 33 and Fry Scholarship benefit users will have financial aid (i.e. grants, loans, scholarships, etc.) specifically awarded for tuition and fees applied first towards their tuition and fee balance with the university. The VA will pay the difference up to the percentage at which the student is rated. The JABVC will report tuition to the VA at the beginning of the semester as $\$ 0.00$ in order to allow applicable housing and book stipends to be paid without delay due to factoring out applicable financial aid. The final tuition amount will be reported to the VA later in the semester for payment to SDSU. Students may receive occasional notifications from the university that their tuition has not been paid. These can generally be disregarded provided the student has been certified to the VA and rated at $100 \%$ under the Post $9 / 11 \mathrm{GI}$ Bill. For questions, students should contact the JABVC staff.


## Return of Tuition Assistance Requirements

Student Account Services will perform a Return of Tuition Assistance (TA) calculation when a TA recipient withdraws from his or her course. When a student who has received TA funds withdraws or otherwise fails to complete a period of enrollment for which he or she was charged, the university is required to determine if unearned TA funds must be returned to the appropriate branch of service. Calculations will be based on the withdrawal date and the percentage of the period of enrollment completed.

Return of TA funds process may result in the student owing the university for unpaid tuition and fees. After the drop/add deadline of the semester, schedule adjustments are only permitted for serious and compelling reasons.

A student earns 100 percent of the Tuition Assistance funding once he or she has completed more than 60 percent of the course. For example, if a student withdraws from a 16 -week course prior to the last day to receive a refund (see Spring 2019 Prorated Refund Schedule), then the return to Tuition Assistance would be calculated and refunded accordingly.

## Out-of-State Residency and Military Exemption

Subject to pending or new legislation, non-resident students may have an additional fee per unit which is not covered by the GI Bill. For further clarification, please contact the Office of Admissions. Students utilizing Chapter 30 or 33 may qualify for an exemption of the non-resident fees provided.

Students eligible for the benefit (the veteran or dependent who was transferred the benefit [Chapter 33 only]) separated from active duty within 36 months of the first day the veteran or dependent starts classes must provide the following documentation:

- Veteran's copy of form DD-214;
- Verification of student's physical address (California state ID or driver's license, rental/lease agreement, or utilities statement).

Students eligible for Chapter 33 benefits transferred to them may be eligible for an out-of-state military exemption while the service member is still on active duty and must provide the following documentation:

- Copy of service member's most current orders;
- Memorandum from service member's commanding officer;
- Copy of student's Certificate of Eligiblity;
- Verification of student's physical address (California state ID or driver's license, rental/lease agreement, or utilities statement).
If a student is a dependent (spouse or child) of an active duty service member and stationed in California, they may be eligible for military exemption if they provide the following documents:
- Copy of service member's most current orders;
- Memorandum from service member's commanding officer.


## California Department of Veterans Affairs (CDVA) College Fee Waiver for Veterans' Dependents (Cal-Vet Fee Waiver)

The Cal-Vet Fee Waiver benefit waives the mandatory systemwide (California State University, University of California, and California Community College systems) tuition and fees, but the student is still responsible for the campus mandatory fees every semester. Students utilizing the Cal-Vet Fee Waiver Plan A, cannot receive concurrent benefits under Chapter 35, Dependents Education Assistance. Additionally, the waiver does not cover the expense of books, parking, room and board, and may not be applied towards tuition and fees paid through SDSU Global Campus. To qualify, students must meet residency requirements as determined by SDSU, in addition to other qualifying criteria. For additional information on establishing residency, students should contact the Office of the Registrar. Students using the CalVet Fee Waiver must provide a copy of the approval letter to the JABVC every academic year (the letter will cover summer, fall, and spring terms). Applications for the waiver must be submitted to the nearest county veterans service office. For more information about applying for the Cal-Vet Fee Waiver, visit http://www.calvet. ca.gov.

## Non-College Degree Programs and External Degrees

Non-college degree (NCD) programs (i.e., certificates and credentials) can be certified for federal VA education benefits if the program has been approved and is listed on the Web Enabled Approval Management System (WEAMS). Programs not listed cannot be certified for federal VA benefits. All NCD programs listed in the SDSU General Catalog or Graduate Bulletin and which are approved on WEAMS may be certified for federal VA education benefits through the JABVC following the same procedures listed above. External degree programs may also be certified for federal VA benefits through the JABVC. Students should contact the JABVC staff to ensure their requested NCD program or external degree program is approved for certification before entering into the program. The Cal-Vet Fee Waiver will not waive tuition for programs offered through SDSU Global Campus.

## SDSU Global Campus

Some programs offered specifically through SDSU Global Campus may be certified for VA benefits. Students are encouraged to contact JABVC staff for additional information about policy, program applicability, and certification procedures through SDSU Global Campus.

## SDSU Imperial Valley

Students attending SDSU Imperial Valley in Calexico, California should contact the SDSU-IV assistant dean for student affairs at 760-768-5502 for the latest information on certification procedures for federal/state VA education benefits.

## Additional Resources and Information

In addition to assistance with educational benefits, several other programs and resources are available for eligible students. These include, but are not limited to:

- Priority registration for eligible military students beginning the second semester of attendance (for more information, contact the Office of the Registrar);
- A one-unit transition class (not eligible for VA benefit certification) for newly enrolled military affiliated students to provide key information about student support services at SDSU;
- Access to The Jack McGrory Bunker - a student lounge within the JABVC in which all military affiliated students can rest, relax, study, and interact with other students before, between, or after classes;
- Access to the SDSU VetSuccess on campus counselor who provides full-time assistance on all VA related issues;
- Participation in the VA work-study program allowing eligible students to work part-time while attending school (dependent upon staffing needs);
- Assistance with the VA tutorial assistance program;
- Use of the on-campus Student Veterans House, the first of its kind in the nation, affording all military affiliated students a place to study, relax, and interact with other students with similar backgrounds;
- Priority access to designated veterans living spaces on campus through the fraternity row property management office;
- Partnership with the Student Veterans Organization at SDSU which represents the cultural niche of the military student body;
- Partnership with the Veterans Alumni Organization at SDSU which provides mentorship, advice, and guidance from former military students to those currently attending;
- Access to veteran and military affiliated scholarships;
- Access to military specific career transition programs to assist with internships, job openings, and career opportunities.
Active duty military, veterans, and military spouses who are upper division transfers may receive additional consideration for admission. For more information, contact the military liaison officer at 619-594-0834.


## Points of Contact

Joan and Art Barron Veterans Center
Student Services West, Room 1661
http://www.sdsu.edu/veterans
veterans@sdsu.edu
619-594-5813
California Department of Veterans Affairs
http://www.calvet.ca.gov

## Department of Veterans Affairs

http://www.ebenefits.va.gov
888-442-4551
Web Enabled Approval Management System (WEAMS)
http://inquiry.vba.va.gov/weamspub/buildSearchInstitutionCriteria.do



# Division of Academic Engagement and Student Achievement 

OFFICE: Administration 101
TELEPHONE: 619-594-5841 / FAX: 619-594-2049

## Administration

## Associate Vice President for Academic Affairs, Student

 Achievement: Norah P. ShultzAssistant Vice President for Educational Effectiveness: Stephen A. Schellenberg
Assistant Dean for Academic Engagement and Student
Achievement: Michelle Lopez
Assistant Dean for Special Projects: Tanis K. Starck

## General Information

The mission of the Division of Academic Engagement and Student Achievement is to develop and enhance learning communities that foster inquiry, interdisciplinarity, and academic achievement. By continuously improving and adapting academic programs and services, we nurture students' abilities to learn, to respect diversity of peoples and ideas, and to work toward social justice and a sustainable future. Through this work, the division creates opportunities for creativity, collaboration, innovation, and academic excellence throughout the university and community.

The division works toward its mission through a variety of uni-versity-wide programs and services. The division is structured into five areas, although its activities transcend and personnel work across these divisions:

- Undergraduate Studies
- Honors College and Honors Societies
- Educational Effectiveness
- High Impact Practices


## Undergraduate Studies

## Academic Student Success and Compact Scholars Programs

Janet M. Abbott, Director
The Compact Scholars Program is the postsecondary component of the Compact for Success, a collaborative partnership initiated in 2000 between the Sweetwater Union High School District and San Diego State University. Compact Scholars benefit from services such as academic advising, peer mentoring, and faculty-led programs and from participation in high impact practices including study abroad, service learning, undergraduate research, creative activities, and internships. The goal of the Compact Scholars Program is to deepen student engagement and to promote higher graduation rates for Sweetwater District students. For more information, visit http://csp.sdsu.edu, e-mail sdsu-compactscholars@sdsu.edu, or call 619-594-0563.

BE HIP! includes a series of activities, events, and programming across campus to promote undergraduate student participation in High Impact Practices (HIPs). The BE HIP! student-centered campaign aims to inform all students on the benefits of experiential learning activities such as studying abroad, undergraduate research and creative activities, service learning, and internships. Strategic collaborations across departments focus on efforts to engage diverse students, including first-generation, low-income, commuter, foster, and underrepresented students in high impact educational practices. The BE HIP! Expo annually showcases the many levels of student involvement in these kinds of academic experiences. Students, faculty, and staff join together to exhibit examples of their HIP-related collaborative work.

## Transition Advising Center, Undeclared Students, and Interdisciplinary Studies in Three Departments

Paul W. Justice, Director
The SDSU Transition Advising Center supports all students who are considering transitioning to a new major. Specific groups of students served include: students who enter SDSU as first year undeclared students, who entered SDSU with a declared premajor but want to change their major, who have declared an upper division major but need to change their major, and students who wish to transition to the Interdisciplinary Studies major. Services provided include: academic advising (face to face and e-mail) by trained faculty and staff advisers, transition mentoring (face to face) by trained graduate interns, and undeclared peer mentoring (face to face) by trained undergraduate mentors

First-year students who are undecided about a major have the option of the undeclared premajor. Undeclared premajors have the flexibility and challenge to complete a variety of course options while still earning their degree within four years. The Division of Academic Engagement and Student Achievement collaborates closely with Career Services and the academic colleges to support students in choosing a major. Additional resources and support also include participation in the Undeclared College Council, utilization of the Undeclared Blackboard Homeroom, year-round walk-in advising, and student success workshops. Students are encouraged to follow the Undeclared MyMap, meet with a career counselor at Career Services their freshman year, and visit with faculty and staff advisers in their premajor(s) of interest as soon as possible. Undeclared students are also encouraged to conduct informational interviews with professionals employed on campus and in the community to connect possible majors with future employment options. For more information, visit https:// undeclared.sdsu.edu/ or call 619-594-5842.

The interdisciplinary studies in three departments (IS3D) major at San Diego State University is a special major designed for students whose career goal or academic interest is not addressed by an existing SDSU major or major/minor pattern. Students are responsible for identifying the fields they wish to pursue, developing their program of study with the assistance and written approval of multiple advisers, and defending their choices orally and in writing.

For more information about the interdisciplinary major in three departments, see the General Catalog or visit https://is3d.sdsu. edu/.

## Cultural Proficiency

Tanis K. Starck, Director
Minor in Cultural Proficiency. The minor in cultural proficiency is an interdisciplinary program of study allowing students to develop a broad understanding of the components of diversity in society, to include race and ethnicity, culture, gender, sexuality, religion, language, social class, aging, and disability. This minor is relevant to a career that involves diverse populations of people in business, industry, education, social welfare, health, and medicine. The minor in cultural proficiency is an option for students who want to explore key concepts related to power, identity, and difference, and to understand how historical and structural relations of power and difference shape social relations. Administered by the Division of Academic Engagement and Student Achievement (DAESA), the minor integrates theoretical and practical approaches to the study of diversity. It is designed to enable students to transform the worlds they live in now and will move into after graduation.

Cultural Proficiency Institute for Educators (CPIE). The Cultural Proficiency Institute for Educators provides national leadership and contributes to the body of knowledge on cultural competency within educational systems and organizations. CPIE is a component of San Diego State University and is housed within the Division of Academic Engagement and Student Achievement. CPIE provides cultural competency training, online professional certificates, professional development, consultation, contributes to knowledge through publications and research, supports leaders to promote and sustain cultural competency, and collaborates with an extensive network of private and public entities to advance the implementation of these concepts. CPIE provides services to local, state, federal, and international governmental agencies, family advocacy and support organizations, local hospitals and health centers, universities, quality improvement organizations, national professional associations, and foundations. In addition, the CPIE's online training, publications, and products are accessed by hundreds of individuals each year

## Early Assessment Program

## Rosie Villafana-Hatcher, Director

The Early Assessment Program (EAP) is a collaborative effort among the State Board of Education (SBE), the California Department of Education (CDE), and the California State University (CSU). The program was established to provide opportunities for students to measure their readiness for college-level English and mathematics in their junior year of high school, and to facilitate opportunities for them to improve their skills during their senior year. The goal of the EAP program is to have California high school graduates enter the CSU fully prepared to begin college-level study. The program has three major components: early testing, the opportunity for additional preparation in the 12th grade, and professional development activities for high school English and mathematics teachers. For more information about the Early Assessment Program, visit: http://eap.sdsu.edu or call 619-594-0657.

## First-Generation Student Success and Transfer Student Outreach Alliance

Michele Lopez, Assistant Dean
Educating first-generation students is a priority for SDSU. Twenty percent of SDSU undergraduates are first-generation college students who grew up in households without a parent or guardian who completed a four-year college degree. To ease what can be a challenging transition for students from communities where college is not the norm, the Division of Academic Engagement and Student Achievement (DAESA) works to support first-generation students and their specific needs. Under this initiative, first-generation college students are connected to academic enrichment programs, student support programs and resources, and are given additional tools necessary to succeed, regardless of their major, level, or program. First-generation college students participate in community meetings to connect with other first-generation students, attend first-generation faculty seminars, and engage in small group mentoring sessions to advance their academic and professional development goals. Students are also introduced to the broader honors community, scholarships and fellowships, and are matched with faculty/staff mentors during their first year at SDSU. For more information visit https://first-gen-at.sdsu.edu/ or call 619-594-5842.

Transfer Student Outreach Alliance (TSOA) connects new transfer students to campus resources and assists transfer students in their academic and social transition into the university. Support for first-year transfer students begins with the summer "Transfer Connect" program. This symposium is held post-transfer orientation, but before students start their fall semester. Transfer Connect equips new transfers with the tools and knowledge to achieve, persist, and succeed at the university. Transfer students are introduced to the campus culture and gain the tools to connect with major advisers and mentors, facilitate the transfer process, and learn how to navigate the university. Students are taught how to produce signature work via engagement in high impact practice
(e.g., internships, leadership, service learning, study abroad, and undergraduate research). Academic year programming for new and continuing transfer students is also available in addition to one-on-one or small group mentoring. For more information, contact tsoa.dus@sdsu.edu.

## CSU Initiatives

The Division of Academic Engagement and Student Achievement (DAESA) is the contact for many of the initiatives from the CSU Chancellor's office. Currently, the division is helping to implement curricular changes related to CSU Executive Orders 1100 and 1110. Given our role as the lead unit for student success, we are supporting the efforts related to Graduation 2025 (https://www2.calstate.edu/csu-system/why-the-csu-matters/ graduation-initiative-2025).

The California Promise is a guarantee from the California State University (CSU) that a new student can earn a degree in no more than two years (Associate in Arts degree for transfer students) or no more than four years (new first-time, first-year students). For specific requirements, visit: https://californiapromise.sdsu.edu/.

## General Studies

General studies courses serve as pathways for academic recovery, student transitions, and transformational learning experiences in community engagement, creative practices, internships, research, shared intellectual programs, and study abroad. A select number of general studies courses satisfy general education graduation requirements. Refer to the Course Information and Programs section of this catalog.

## Honors College and Honor Societies

## Weber Honors College

## Stacey L. Sinclair, Director

The Weber Honors College is a community of scholars-students, faculty, and staff-committed to high academic achievement, the development of leadership skills, social responsibility, and international experience. The Weber Honors College features unique courses and small seminars through which students, working closely with faculty mentors, learn to think flexibly, solve complex problems, and pursue the creative expression of ideas. These classes are characterized by discussion, debate, and the pursuit of intellectual challenges that prepare students for high-impact educational experiences regardless of their chosen field of study.

Honors Residential College. Entering local and out-of-area freshmen accepted into the Weber Honors College are required to live in the Honors Residential College in Zura Hall during their first year. This opportunity is designed to ensure an exceptional undergraduate experience for honors students by integrating the unique components of the honors experience with the enriched advantages that Residential Learning Communities provide. The Honors Residential College features a supportive educational environment where students from diverse backgrounds pursue academic, co-curricular, and experiential activities related to academic engagement, campus activities, and leadership opportunities.

Weber Honors College students have the use of the Darlene Gould Davies Honors Study room, located in Love Library, Room 428A, as well as a Student Learning Lounge adjacent to the Weber Honors College offices (Administration, Room 201).

For a description of the Weber Honors College, admission requirements, and curriculum, refer to the Weber Honors College in the Courses and Curricula by Department section of this catalog. Information about the Weber Honors College can be accessed online at http://www.sdsu.edu/honors.

Departmental Honors Courses. Some departments regularly offer honors classes independently of the Weber Honors College, with eligibility defined by the sponsoring department. Students should consult the Class Schedule for such honors classes and contact the department or instructor for additional information.

## National Scholarships and Fellowships

Michelle Lopez, Assistant Dean
The National Scholarships and Fellowships office supports SDSU students interested in applying for prestigious national and international scholarships, such as the Goldwater, Marshall, Rhodes, Truman, and Udall scholarships. Candidates for these awards include diverse majors, both honors and non-honors undergraduate students, from across the university. In addition to assisting candidates applying to these major scholarships, the National Scholarships and Fellowships office works closely with SDSU faculty to identify potential candidates and to encourage prospective candidates to apply for these major awards.

To be competitive for these awards of excellence, students are encouraged to maintain the highest possible academic performance, enroll in courses that encourage critical thinking from a broad range of perspectives, participate in campus and community activities beyond membership, and take on leadership roles when appropriate. Current and prospective students interested in learning more about national scholarships and fellowships should visit: http://onsf.sdsu.edu/dus/scholarships/ and schedule an appointment with Michelle Lopez, Assistant Dean, Division of Academic Engagement and Student Achievement, mlopez@sdsu. edu or call 619-594-5842.

## Honors Societies

Refer to the Special Programs and Services section of this catalog.

## High Impact Practices

## Center for Regional Sustainability

Jessica A. Barlow, Executive Director
The San Diego State University Center for Regional Sustainability (SDSU/CRS) fosters research; establishes collaborations across campus and with partners from business, government, and education; and generates solutions that enhance the natural environment, economic vitality, and social equity in our region (San Diego and Imperial Counties and northern Baja California). The primary mission of SDSU/CRS is to advance sustainability through regional collaborations in higher education, research, stewardship, and outreach to ensure that generations of students will gain the skills and abilities to allow our region to grow, prosper, and sustain itself in the long term. The SDSU/CRS is home to Brightside Produce San Diego, the Sage Project, and the Social and Economic Vulnerabilities Initiative. More information is available at http://crs.sdsu.edu.

## The Sage Project

Jessica A. Barlow, Executive Director
The Sage Project is a partnership between San Diego State University and a local government in the San Diego region for an academic year. Sage focuses courses across the university on assisting with projects that address the community partner's livability goals. Students have the opportunity to engage in meaningful real-world projects and contribute to the quality of life of a community in the greater San Diego-Tijuana region through their course-based effort. Sage embodies the university's commitment to serving local students, engaging alumni, and contributing to the public good by focusing thousands of hours of course-based student effort in a community in our service area. The program ensures that the many ideas developed by students through their coursework-ideas that might otherwise only be appreciated by a faculty member-are distributed to a wider audience, thereby ensuring a positive impact on the community and strengthening civic ties among local students. The true benefit of the program is the positive attention, collaborative learning, and new momentum the partnership provides for students, faculty, city staff, and residents. For more information about the program, visit http://sage. sdsu.edu.

## Brightside Produce San Diego

Iana Castro, Director
Brightside Produce designed and implemented a sustainable produce distribution model to tackle food insecurity in underserved communities. It provides a service that increases the accessibility, availability, and affordability of fresh fruits and vegetables by serving as a produce distributor that reaches customers in underserved communities and university communities. Brightside Produce is operated by students. For more information about Brightside Produce, visit http://brightside.sdsu.edu. .

## Social and Economic Vulnerabilities Initiative

## Mounah Abdel-Samad, Director

The Social and Economic Vulnerabilities Initiative (SEVI) is a collaboration between experts from diverse disciplines examining the issues of homelessness and housing in the San Diego region. Together, we research obstacles and solutions to provide answers for policy makers. SEVI brings together community leaders, policy makers, researchers, and students to investigate, propose, and create new innovative solutions to support affordable housing and reduce homelessness. For more information about SEVI, visit http://crs.sdsu.edu/sevi.

## Faculty-Student Mentoring Program

José R. Preciado, Director
Faculty-Student Mentoring Program (F-SMP). Faculty-Student Mentoring Program serves to support student engagement and development through undergraduate research, scholarship, and creative activities. Central to these efforts is the development of long term relationships between students and their faculty mentors as they engage in academically purposeful tasks. To achieve this mission, the program supports eligible students by providing academic planning guides to help students participate in rigorous academic endeavors and activities; facilitating participation in undergraduate research, scholarship, and creative activities across colleges and disciplines; offering active student academic support for these efforts through workshops and undergraduate university seminars; fostering mentoring, coaching, and other nurturing interactions among students and faculty mentors; and by presenting students with opportunities for regional and national professional forums. For more information about the mentoring program, visit http://fsmp.sdsu.edu/ or call 619-594-2209.

Academic Internships Program (AIP). The Academic Internships Program serves students who do not have internship requirements in their major and are seeking options to earn college academic credit to meet graduation requirements. Students may earn one to three units of General Studies 200 or 400 credit with an approved plan prior to starting an internship in the fall or spring semester. Three-unit General Studies 200 or 400 summer sections are offered in the T1 session ( 13 weeks). Summer fees apply. For more information about the program, visit https:// daesa.sdsu.edu/academic-internships or call 619-594-2209.

## Service Learning and Community Engagement Program (SLCEP)

Vinod Sasidharan, Director
The Service Learning and Community Engagement Program (SLCEP) is a faculty outreach and development program that serves to increase student learning through course-based study that connects to responsive civic action in local, regional, or international locales. SLCEP initiatives are designed and implemented to foster civic engagement, civic participation, and civic responsibility. The goals of the SLCEP are to integrate service learning with other high-impact practices, such as study abroad and participatory action research (PAR); to document student learning in community contexts; and to continue developing a system to track SDSU community service contributions and partnerships. The program also sponsors General Studies 280 and 480 each semester. See the Class Schedule for times and faculty participation listings. For more information about the program, visit http:// servicelearning.sdsu.edu or call 619-594-2209.

Undergraduate Studies Internship Program (USIP). The Undergraduate Studies Internship Program (USIP) serves students who do not have internship requirements in their major and are seeking options to earn college academic credit to meet graduation requirements. Students may earn one to three units of General Studies 200 or 400 credit with an approved plan prior to starting an internship in the fall or spring semester. Three-unit General Studies 200 or 400 summer sections are offered for the T1 session ( 13 weeks). Summer fees apply. For more information about the program, visit http://dus.sdsu.edu/dus/dusinternships/ or call 619-594-2209.

## International Engagement

Chris Kjonaas, Director
The International Engagement program works across colleges and disciplines at SDSU to promote high-quality global education for SDSU students. The program coordinates the following three major initiatives: (1) campus-wide efforts to assess learning outcomes from SDSU study abroad programs in order to demonstrate evidence of student achievement and improve program effectiveness; (2) advising and outreach to SDSU faculty, staff, and students about major international graduate fellowship opportunities and the SDSU campus endorsement process; (3) connection of students in the Weber Honors College and Compact Scholars Program to high quality international opportunities through study abroad guidance and programming, development of tailored faculty-led programs and assistance with study abroad scholarships. For more information about the program, visit http:// intl-engagement.sdsu.edu or call 619-594-2200.

## International Programs

Refer to the Special Programs and Services section of this catalog.

## Educational Effectiveness

## Center for Supplemental Instruction

## Emily A. Bates, Coordinator

Supplemental Instruction (SI) provides students in high-challenge courses with additional voluntary and non-remedial study sessions focused on active learning strategies. Since Sl's implementation at SDSU in 2015, SI-participating students have typically averaged a half to full letter grade higher examination performance compared to non-SI-participating students. SI sessions are facilitated by undergraduate students who successfully completed the course and are trained as SI leaders. Since SI focuses on high-challenge courses rather than at-risk students, SI participants range from those excelling in the course to students who may be struggling. SI sessions are offered throughout the week to maximize student access.

Information about Supplemental Instruction, courses, and session schedules may be found at https://its.sdsu.edu/supplemen-tal-instruction/ or by contacting the SI coordinator at SILeader1@ sdsu.edu or 619-594-2205.

## Division of Graduate Affairs

OFFICE: Student Services East 1410
TELEPHONE: 619-594-5213 / FAX: 619-594-0189
E-MAIL: gra@sdsu.edu

## Organization and Administration

The Division of Graduate Affairs is under the jurisdiction of the Office of the Provost whose administrative officers are the vice president for research and the dean of the Division of Graduate Affairs. In coordination with the Graduate Council, the division has responsibility for all graduate curricula and policy matters governing graduate study at San Diego State University. The dean of the Division of Graduate Affairs serves as chair of the Graduate Council.

The Division of Graduate Affairs, in conjunction with Graduate Admissions, admits all students to the university. The Division of Graduate Affairs authorizes graduate degree curricula, evaluates, and processes students for graduation. The Division of Graduate Affairs also determines students' eligibility to continue in such curricula and, in the cases of unsatisfactory performance, requires students to withdraw from graduate curricula and the university.

The dean of the Division of Graduate Affairs is the appropriate university authority for the administration of all matters related to graduate admissions, academic status, and graduate degree curricula, minimum requirements for which are specified in Section 40510 of the California Code of Regulations.

## Association Membership

San Diego State University is a member of the Western Association of Graduate Schools and the Council of Graduate Schools in the United States.

## Degrees Offered

All master's degrees are conferred by the trustees of The California State University upon recommendation of the faculty of San Diego State University. These degree programs provide instruction for graduate students in the liberal arts and sciences, in applied fields, and in the professions, including the teaching profession.

Doctor of Philosophy degrees and a professional doctorate (Au.D.) degree are awarded jointly by the Board of Regents of the University of California and the Board of Trustees of The California State University in the names of San Diego State University and the cooperating campus of the University of California; in Education, jointly by the Board of Trustees of The California State University and the Board of Fellows of Claremont Graduate University. The Doctor of Education degree (Ed.D.) is awarded jointly by the Board of Trustees of The California State University and the trustees of the University of San Diego in the names of San Diego State University and the University of San Diego. The Doctor of Education degree (Ed.D.) in educational leadership and the Doctor of Physical Therapy (DPT) are awarded by the Board of Trustees of The California State University.

## Doctor of Philosophy

Biology (Cell and Molecular)
Chemistry
Clinical Psychology
Computational Science/Statistics
Ecology
Education
Engineering Sciences
Bioengineering
Electrical and Computer Engineering
Mechanical and Aerospace Engineering
Structural Engineering
Evolutionary Biology
Geography

| Geophysics |  |
| :---: | :---: |
| Interdisciplinary Research on Substance Use |  |
| Language and Communicative Disorders |  |
| Mathematics and Science Education |  |
| Public Health/Epidemiology |  |
| Public Health/Global Health |  |
| Public Health/Health Behavior |  |
| Doctor of Education |  |
| Education |  |
| Educational Leadership |  |
| Concentration in PreK-12 Leadership |  |
| Concentration in Community College/Postsecondary Leadership |  |
| Professional Doctorates |  |
| Audiology |  |
| Doctor of Physical Therapy |  |
| Educational Specialist |  |
| Ed.S. in School Psychology |  |
| Master of Arts |  |
| Anthropology | Learning Design and |
| Art | Technology |
| Asian Studies | Liberal Arts and Sciences |
| Biology | Linguistics |
| Chemistry | Mathematics |
| Chicana and Chicano Studies | Music |
| Communication | Philosophy |
| Economics | Physics |
| Education | Political Science Psychology |
| English | Rhetoric and Writing Studies |
| French | Sociology |
| Geography | Spanish |
| History | Speech, Language, and Hearing Sciences |
| Interdisciplinary Studies | Teaching |
| Latin American Studies | Theatre Arts |
|  | Women's Studies |
| Master of Science |  |
| Accountancy | Geography |
| Aerospace Engineering | Geological Sciences |
| Applied Mathematics | Global Business Development |
| Astronomy | Gerontology |
| Big Data Analytics | Homeland Security |
| Bioengineering | Hospitality and Tourism |
| Bioinformatics andMedical Informatics | Management |
|  | Information Systems |
| Biology | Interdisciplinary Studies |
| Business Administration | Kinesiology |
| Chemistry | Mechanical Engineering |
| Child Development | Medical Physics |
| Civil Engineering | Meeting and Event Management |
| Computational Science | Microbiology |
| Computer Science | Nursing |
| Counseling | Nutritional Sciences |
| Criminal Justice and | Physics |
| Criminology | Psychology |
| Cybersecurity Management | Public Health |
| Electrical Engineering | Regulatory Affairs |
| Epidemiology | Rehabilitation Counseling |
| Exercise Physiology | Statistics |

## Geophysics

Interdisciplinary Research on Substance Use
Language and Communicative Disorders

Public Health/Epidemiology
Public Health/Global Health
octor of Education

Educational Leadership
Concentration in PreK-12 Leadership
Concentration in Community College/Postsecondary Leadership
Professional Doctorates
Audiology

Educational Specialist
Ed.S. in School Psychology

Anthropology
Art
Studies
chemistry
Chicana and Chicano Studies
Communication
omics

English
French

History
Interdisciplinary Studies
Latin American Studies

## Master of Science

Accountancy

Applied Mathematics

Astronomy
Big Data Analytics
Bioengineering
Biontics and Biology
Business Administration
Chemistry
Child Development

Computer Science
Counseling
Criminal Justice and

Cybersecurity Management
Electrical Engineering

Exercise Physiology

Learning Design and Technology
Liberal Arts and Sciences
Linguistics

Philosophy
Physics
Political Science Psychology

Spanish
Speech, Language, and
Sciences

Teaching
Theatre Arts

Geography
Geological Sciences
Global Business Development
Gerontology
omeland Security

Management
nformation Systems

Kinesiology
Mechanical Engineering
Medical Physics

Microbiology
Nursing
Nutritional Sciences
ysics

Psycholt

Regulatory Affairs

Statistics

## Professional Master's Degrees

Master of Business Administration
Master of City Planning
Master of Engineering
Master of Music
Master of Public Administration
Master of Public Health
Master of Social Work

## Master of Fine Arts

Art
Creative Writing
Film and Television Production
Theatre Arts

## Concurrent Degrees

Master of Business Administration and Juris Doctor
Master of Business Administration and Master of Arts in Latin American Studies

Master of Public Administration and Master of Arts in Latin American Studies

Master of Public Health and Master of Arts in Latin American Studies
Master of Science in Nutritional Science and Master of Science in Exercise Physiology
Master of Social Work and Juris Doctor
Master of Social Work and Master of Public Health

## Graduate Admission Categories

Applicants seeking admission to graduate study at San Diego State University must apply and be accepted in one of the following categories:

Post-Baccalaureate Standing (Unclassified). Exchange students (non-foreign), visitors from other CSU campuses, and other transitory students may be admitted for one semester as unclassified graduate students; or

Post-Baccalaureate Standing (Conditionally Classified, Credential, and Certificate). Persons wishing to enroll in a credential in professional education or an advanced certificate program who meet the criteria specified under General Admission Requirements but who have deficiencies for classified admission to the department's credential or certificate program. Admission is dependent on if the deficiencies can be met by specific additional preparation, including qualifying examinations. No more than 18 semester units may be assigned to satisfy deficiencies in prerequisite education; or

Post-Baccalaureate Standing (Classified). Persons wishing to enroll in a credential (only) or advanced certificate (only) program. Persons will also be required to satisfy additional professional, personal, scholastic, and other standards, including qualifying examinations, as prescribed by the appropriate department and campus; or

Graduate Standing (Conditionally Classified). Applicants may be admitted to a graduate degree program in this category if deficiencies may be remedied by additional preparation, as determined by appropriate campus authority; or

Graduate Standing (Classified). To pursue a graduate degree, applicants are required to fulfill all of the professional, personal, scholastic, and other standards, including qualifying examinations, as prescribed by the campus under General Admission Requirements.
These and other CSU admissions requirements are subject to change as policies are revised and laws are amended. The CSU website http://www.calstate.edu and the CSU admissions portal http://www.calstate.edu/apply are good sources of the most up-to-date information. For SDSU graduate admission procedures, see the Admission and Registration section of this catalog.

## Graduate Bulletin

A Graduate Bulletin is published annually that contains complete details on SDSU graduate study. The Graduate Bulletin can be accessed online at http://www.sdsu.edu/catalog/bulletin.

## Division of Research Affairs

## Research Affairs

The Division of Research Affairs is responsible for the institutional approval of all grant proposals and contracts relating to sponsored research, instruction, and service agreements; administration of research regulatory and intellectual property services; administration of intramural faculty grants, fellowships and other institutional research support programs; administration of university cost-sharing; coordination of SDSU Research Foundation/ University liaison.

The Division of Research Affairs is supervised by the director, who with the vice president for research, is responsible for the development, improvement, and administration of research activities at the university.

The importance of research in graduate instruction is recognized by the faculty, and all graduate programs provide for research on the part of the graduate student. Graduate students involved in thesis or other research at the university must comply with all applicable university research policies, including, but not limited to, those related to the use of human and animal subjects in research.

## University Research Facilities <br> and Organizations

Among the facilities for research that students may utilize are those provided in organized bureaus, centers and institutes located on the campus; specialized off-campus research facilities and field stations; inter-institutional, consortia and other cooperative research facilities.

## Graduate Research Centers and Institutes

## California State University Program for Education and Research in Biotechnology (CSUPERB) <br> Susan Baxter, Executive Director

Created in 1987 as a systemwide program, the California State University Program for Education and Research in Biotechnology (CSUPERB) funds student scholarships, partners with the life science industry, and supports collaborative CSU student and faculty bio-entrepreneurship projects and research. CSUPERB also organizes the annual CSU Biotechnology Symposium and hosts the NSF-funded CSU I-Corps entrepreneurship education program, where students can meet and talk with alumni and professionals in the biotechnology industry.

The CSUPERB program office is hosted at San Diego State University but serves and supports faculty and students at all 23 CSU campuses. The program involves more than 700 students and faculty from agriculture, business and computer science departments, clinical sciences, engineering, life sciences, mathematics, and physical sciences annually.

CSUPERB knows that successful biotechnology students have opportunities to integrate coursework, hands-on practice and participation in interdisciplinary entrepreneurship or team-based research projects. CSUPERB's competitive award, scholarship, and seed grant programs include Crellin Pauling Student Teaching Awards, CSU I-Corps program, Don Eden Graduate Student Research Award, Glenn Nagel Undergraduate Research Award, Howell-CSUPERB Research Scholars Awards, Presidents Commission Scholar Awards, and student travel grant programs. In total, CSUPERB programs award over $\$ 800,000$ to CSU faculty and students annually.

Visit the program websites at http://www.calstate.edu/csuperb and http://www.csuperb.org/csuicorps for more information.

## Mount Laguna Observatory

Paul B. Etzel, Director, Professor Emeritus
San Diego State University operates Mount Laguna Observatory under special permit from the US Forest Service some 45 road miles east of the campus at an elevation of 6100 feet in the Cleveland National Forest. The current research telescopes include two reflectors with apertures of 24-and 40-inches; a new

48 -inch reflector is being built jointly with the University of Kansas. Each has a modern telescope control system that allows for remote and robotic observing over the Internet via high-speed (45 Mbps) wireless connectivity through the University of California, San Diego. Auxiliary equipment includes multiple CCD cameras, Near-IR camera, CCD spectrograph, and photoelectric photometers. Support facilities include a shop building, dormitory and apartments for observers. Associated with the observatory is the Awona Harrington Visitor Center, which supports educational programs and visiting astronomers. The 21-inch Buller telescope serves General Education classes on the main campus, and limited public outreach programs in the summer months with the US Forest Service. The website is http://mintaka.sdsu.edu.

## Watershed Science Institute (WSI)

Trent W. Biggs, Director
The Watershed Science Institute (WSI) promotes collaboration among SDSU researchers and communities involved in the management and regulation of land and water resources. The objective of WSI is to improve the integration of science, policy, and management of watersheds by aligning research questions with critical management needs. The regional focus is on Southern California, including San Diego County, Imperial Valley, and the US-Mexico Border region, all of which face critical challenges related to water resources and water quality, drinking water supply shortages, climate change, water quality deterioration, impaired surface water bodies, soil erosion, and coastal contamination. WSI has collaborators across the university, including faculty in biology, civil and environmental engineering, geography, mathematics and statistics, and public health, and is therefore a university-wide institute housed in the Division of Research Affairs. Community collaborators include the City of San Diego Water Department, San Diego Coastkeeper, San Diego Regional Water Quality Control Board, San Diego River Conservancy, San Diego River Park Foundation, Southern California Coastal Water Research Project, and others. For more information, visit http:// watershed.sdsu.edu.

## Regulatory Compliance

## Conflict of Interest Committee (COI)

SDSU investigators submitting, renewing, or participating in a proposal requesting funds from any designated external sponsor or receiving a gift or monetary pledge must file the appropriate financial disclosure statement at the time of the submission of the federal proposal, or within 30 days or prior to receipt of a privately sponsored grant or contract or receipt of a gift or monetary pledge. Disclosures must be updated on an annual basis during the period of the award and as new reportable significant financial interests are obtained. Disclosure statements are reviewed and evaluated by the Conflict of Interest Committee. The committee reviews the information provided by the investigator to determine whether the financial interest could affect the conduct or reporting of the project, and determine if any conditions or restrictions should be imposed on the investigator or research protocol in order to manage, reduce, or eliminate conflicts that are identified. The committee may also evaluate whether the financial interest has the potential to influence financial expenditures, personnel decisions, or facilities usages, limit or influence the teaching and research environment of the university. For more information contact the Division of Research Affairs, 619-594-5938. The website is http://research.sdsu.edu/research_affairs/conflict_of_interest.

## Institutional Animal Care and Use Committee (IACUC)

The Institutional Animal Care and Use Committee at SDSU functions in accordance with Federal and State regulations and institutional policy. The Division of Research Affairs provides administrative support to this committee for implementing university policy for research, testing, or education involving the use of animals. Call 619-594-0905 for more information. The website is http://research.sdsu.edu/research_affairs/animal_care.

## Institutional Biosafety Committee (IBC)

SDSU is responsible for ensuring that recombinant DNA research or experiments involving biological or potentially hazardous materials are conducted in compliance with the National Institute of Health Guidelines to promote safe and responsible practices. The Institutional Biosafety Committee (IBC) reviews research for this purpose. The Division of Research Affairs provides administrative support to the IBC.

For information regarding SDSU's Biosafety Program, visit the Environmental Health and Safety website at https://bfa.sdsu.edu/ safety/ehs or contact the Institutional Biosafety officer at 619-5942865. For information specific to the Institutional Biosafety Committee, contact the Division of Research Affairs, 619-594-0905 or e-mail ibc@sdsu.edu. The website is http://research.sdsu.edu/ research_affairs/biosafety.

## Institutional Review Board (IRB)

The Institutional Review Board (IRB) reviews research when procedures are proposed to obtain information about a living individual through the use of a survey, interview, observation, experimentation, or the analysis of human tissues, records, samples, or other data previously collected from human subjects. All research involving human subjects, conducted within the jurisdiction of SDSU's Federalwide Assurance, must be reviewed and approved by the IRB in advance of study initiation. The IRB reviews research involving human subjects to determine and certify that all projects comply with the federal and institutional regulations and policies, and ethical standards.

The Division of Research Affairs provides administrative support to the IRB. For general information, application procedures, guidance on ethical practices, and submission deadlines visit the website at http://research.sdsu.edu/research_affairs/human_ subjects, e-mail irb@sdsu.edu, or call 619-594-6622.

## Research Promotion

## Albert W. Johnson University Research Lecture

Sponsored by the University Research Council and Graduate and Research Affairs, the Albert W. Johnson University Research Lectureship is awarded annually to an SDSU faculty member for outstanding achievement in research and scholarship. The purpose of the University Research Lectureship is to recognize such achievement, to foster its continuance, and to enable a distinguished resident faculty scholar to share knowledge more broadly with the academic community and the community-at-large.

Lecturers have included Dr. Joseph W. Ball, Professor of Anthropology; Dr. Diane K. Lapp, Professor of Teacher Education; Dr. Arthur Getis, The Stephen and Mary Birch Foundation Chair in Geographical Studies and Professor of Geography; Dr. Dipak K. Gupta, Professor of Political Science; Dr. E. Percil Stanford, Professor of Social Work; Dr. Donna J. Thal, Professor of Speech, Language, and Hearing Sciences; Dr. Catherine Yi-yu Cho Woo, Professor of Chinese [Senate Distinguished Professor]; Dr. Edward P. Riley, Professor of Psychology; Dr. Melbourne F. Hovell, Professor of Public Health; Dr. William G. Tong, Professor of Chemistry and Biochemistry; Dr. Eugene A. Olevsky, Professor of Mechanical Engineering; Dr. Walter C. Oechel, Professor of Biology; Dr. Mark A. Sussman, Professor of Biology; Dr. John P. Elder, Professor of Public Health [Senate Distinguished Professor]; Dr. James F. Sallis, Professor of Psychology; Dr. John R. Weeks, Professor of Geography; Dr. Sanford I. Bernstein, Professor of Biology; Dr. Karen D. Emmorey, Professor of Speech, Language, and Hearing Sciences; Dr. Samuel S.P. Shen, Professor of Mathematics; Dr. Joanne M. Ferraro, Professor of History; Dr. Douglas A. Stow, Professor of Geography; Dr. Fridolin Weber, Professor of Physics; Dr. Stuart C. Aitken, The June Burnett Chair in Children's and Family Geographies and Professor of Geography; Dr. Christopher C. Glembotski, Professor of Biology; and Dr. Hala N. Madanat, Professor of Public Health. The website is http://research.sdsu.edu/research_affairs/ albert_w_johnson.

## Student Research Committee (SRC)

The Student Research Committee (SRC) is responsible for planning the annual Student Research Symposium (SRS) to showcase student research, scholarship, and creative activities. In addition, members of this committee assist in the review of Graduate Student Travel Fund applications and make recommendations for the Inamori Fellowship program. For more information, visit the website at http://research.sdsu.edu/research_affairs/ student_research_symposium.

## Technology Transfer Office (TTO)

The Division of Research Affairs (DRA) and the Technology Transfer Office (TTO) serve SDSU in the management of new intellectual property developed by SDSU faculty and staff. Both play an active role with responsibilities to ensure compliance with all relevant laws as well as to open doors for impacting the communities where our researchers work. The TTO provides a central location where faculty, students, and staff may receive advice and assistance in the commercialization of their inventions, copyrights, and other scholarly work. In addition, the TTO assists in setting up new spin-off companies and obtaining venture capital for future development. The TTO is an SDSU Foundation office, functioning on behalf of the university community. For more information, call 619-594-0516 or visit the TTO website at https:// research.sdsu.edu/tto.

## University Copyrights and Patents Committee (UCPC)

The University Copyrights and Patents Committee (UCPC), a standing committee of the University Research Council, is charged with implementing the provisions of the copyrights, trademarks, and trade secrets policy, reviewing disclosures and declarations to ascertain the extent of institutional support involved in the completion of intellectual properties and make recommendations to the vice president for research of assignment of ownership rights and division of royalties. For more information about the UCPC and the SDSU policy, see the intellectual properties section of the website at https://senate.sdsu.edu/copyrights-patents-committee.aspx.

## University Grants Program (UGP)

The University Grants Program (UGP) was created to integrate three independent funding mechanisms through which faculty derive internal support for creative and scholarly research. These internal funding sources now include: Research, Scholarship, and Creative Activity (RSCA) awards, the Faculty Development Program (FDP), and Faculty Grant-in-Aid for Research (GIA), the Adams Humanities Endowment and the Office of the Provost. The Division of Research Affairs administers the UGP. For more information, contact the Division of Research Affairs at 619-594-5938 or visit the website at http://research.sdsu.edu/research_affairs/ university_grants_program.

## College of Arts and Letters

## Administration

Dean: Monica J. Casper
Associate Dean: Madhavi M. McCall
Associate Dean: Ronnee D. Schreiber
Assistant Dean for Student Affairs: Karey Sabol
Senior Director of Development: Keely A. Bamberg
Director of Resources Management: Elaine Rother

## General Information

The College of Arts and Letters is at the very heart of liberal arts education at San Diego State University. Its programs in the humanities and social sciences are offered through 18 academic departments and 13 interdisciplinary programs. Arts and Letters courses are offered to explore the experiences of individuals in society, their cultural expressions and practices, their languages, and their philosophical concepts. The college's highly trained, professionally active faculty seek to give students an awareness about the development of present knowledge and how to generate new knowledge. Students are encouraged to develop keen observation skills, the capacity to think critically, and the ability to express their views intelligently and sensitively as leaders. More information can be found at http://cal.sdsu.edu.

## Curricula Offered

Refer to the Courses and Curricula section of this catalog for a complete listing of program requirements and courses offered by departments within the College of Arts and Letters.

## Doctoral Program <br> Geography (Ph.D.)

## Master's Degrees

Anthropology (M.A.), Asian Studies (M.A.), Big Data Analytics (M.S.), Chicana and Chicano Studies (M.A.), Creative Writing (M.F.A.), Criminal Justice and Criminology (M.S.; jointly with the College of Professional Studies and Fine Arts), Economics (M.A.), English (M.A.), French (M.A.), Geography (M.A., M.S.), History (M.A.), Latin American Studies (M.A., M.B.A./M.A.; jointly with the Fowler College of Business, M.P.A./M.A.; jointly with the College of Professional Studies and Fine Arts, M.P.H./M.A.; jointly with the College of Health and Human Services), Liberal Arts and Sciences (M.A.), Linguistics (M.A.), Philosophy (M.A.), Political Science (M.A.), Rhetoric and Writing Studies (M.A.), Sociology (M.A.), Spanish (M.A.), Women's Studies (M.A.).

## Bachelor's Degrees

Africana Studies (B.A.), American Indian Studies (B.A.), Anthropology (B.A.), Asian Studies (B.A.), Chicana and Chicano Studies (B.A.), Classics (B.A.), Comparative International Studies (B.A.), Comparative Literature (B.A.), Economics (B.A.), English (B.A.), European Studies (B.A.), French (B.A.), Geography (B.A., B.S.), German (B.A.), History (B.A.), Humanities (B.A.), International Business (B.A.; jointly with the Fowler College of Business), International Security and Conflict Resolution (B.A.; jointly with the College of Professional Studies and Fine Arts and the College of Sciences), Islamic and Arabic Studies (B.A.), Japanese (B.A.), Language, Culture, and Society (B.A.), Latin American Studies (B.A.), Lesbian, Gay, Bisexual, Transgender, Queer, and Plus (LGBTQ+) Studies (B.A.), Linguistics (B.A.), Philosophy (B.A.), Modern Jewish Studies (B.A.; consortial within CSU), Political Science (B.A.), Religious Studies (B.A.), Rhetoric and Writing Studies (B.A.), Russian (B.A.), Russian and Central European Studies (B.A.), Social Science (B.A.), Sociology (B.A.), Spanish (B.A.), Sustainability (B.A.), Urban Studies (B.A.), Women's Studies (B.A.).

## Minors

African Studies, Africana Studies, American Indian Studies, Anthropology, Asian Studies, Chicana and Chicano Studies, Children's Literature, Chinese, Chinese Studies, Classics, Comparative Literature, Creative Editing and Publishing, Creative Writing, Economics, English, European Studies, French, Geography, German, History, Humanities, International Security and Conflict Resolution (jointly with the College of Professional Studies and Fine Arts and the College of Sciences), Islamic and Arabic Studies, Italian, Japanese, Japan Studies, Jewish Studies, Latin American Studies, Lesbian, Gay, Bisexual, Transgender, Queer, and Plus (LGBTQ+) Studies, Linguistics, Philosophy, Political Science, Portuguese and Brazilian Studies, Religious Studies, Rhetoric and Writing Studies, Russian, Science, Technology, and Society Studies, Sociology, Spanish, Sustainability, Teaching English as a Second or Foreign Language (TESL/TEFL), Text Analytics, United States-Mexican Border Studies, Women's Studies.

## Preprofessional Curriculum

Prelegal

## Certificate Programs

Brazilian Studies, Children's/Adolescent Literature, Children's Literature, Computational Linguistics, Creative Editing and Publishing, Creative Writing, Geographic Information Science, Global Religious Literacy, Human Rights, Indian Religions, Cultures, and Traditions, Korean Studies, Lesbian, Gay, Bisexual, Transgender, Queer, and Plus (LGBTQ+) Studies, Pop Culture, Professional Writing, Public Law, Spanish for the Professions, Spanish Translation and Interpretation Studies, Teaching English as a Second or Foreign Language (TESL/TEFL), Teaching of Writing, Text Analytics, United States-Mexico Border Studies, Women's Studies.

## Research Centers and Institutes

## Bread and Roses Center

Huma Ahmed Ghosh and Kimala J. Price, Co-Directors
The Bread and Roses Center for the promotion of creativity, scholarship, and community action in support of the women's movement, is the first such center in the nation. The Bread and Roses Center plays a central role in promoting activism in close connection with research and teaching. Since its founding in 2002 by the Department of Women's Studies, the center has been home to interdisciplinary and intersectional projects that foster women's economic, social, and political empowerment; promote internationalization and transnational feminist collaborations; build a stronger local feminist community within the university and with other San Diego organizations; link feminist theory to practice; and train future feminist advocates and professionals.

The Bread and Roses Center is housed in the Department of Women's Studies and is led by a committee composed of members from across SDSU and the greater San Diego community. It can be reached by contacting the department office at 619-5942952, by e-mail at breadandroses@sdsu.edu, or on the website at http://breadandroses.sdsu.edu.

## Center for Asian and Pacific Studies

Sandra A. Wawrytko, Director
The Center for Asian and Pacific Studies brings together interested students, faculty, and community members, to promote teaching, research, and contemporary dialogues on the cultures and societies of Asia and the Pacific Rim, and their relationships to North America. To explore East Asia, South Asia, Southeast Asia, the Pacific Rim, and Asian American communities, the center draws on the academic resources of multiple departments and programs within and outside of the College of Arts and Letters, including: anthropology, art, Chinese, comparative literature, economics, geography, history, Japanese, linguistics, philosophy, political science, religious studies, sociology, and women's studies. The center supports colloquia and symposia, curriculum
development, student and faculty research, community research, international programs, and new college initiatives to educate students, community members, and working professionals about Asian and Pacific languages, cultures, politics, economies, histories, and societies. The center promotes faculty and student exchanges with Asian universities as well as study abroad programs in the Asia Pacific. The center houses the undergraduate major, the emphasis in Chinese Studies and Language, a minor in Asian studies, a minor in Chinese studies, as well as the graduate program. For more information, please visit http://asiapacific.sdsu. edu.

## Center for Community Research and Engagement

Minjeong Kim, Interim Director
The Center for Community Research and Engagement, located within the Department of Sociology at San Diego State University, promotes the use of qualitative methods in the quest to understand and explain important aspects of social organization. Qualitative researchers utilize a wide range of methods to gather data including participant observation, in-depth interviews, content analysis, focus groups, photography, film, and videography to accomplish a holistic study of social meanings, social relations, and social institutions. The primary objectives of the center are to:

- Create and sustain an interdisciplinary community of scholars whose principal research focus is qualitative;
- Organize and facilitate workshops and colloquia focusing on the key issues facing qualitative researchers such as methodological, epistemological, and ethical issues;
- Provide a forum for the dissemination of the products of qualitative research across all disciplines.
For more information, contact the center at 619-594-4826.


## Center for Earth Systems Analysis Research (CESAR)

## Trent W. Biggs, Fernando Bosco, and

Douglas A. Stow, Co-Directors
The Stephen and Mary Birch Foundation Center for Earth Systems Analysis Research (CESAR) was founded in 1986 as a com-puter-based facility for geographic information science research and instruction that is administered by the Department of Geography. The purpose of the center is to apply state-of-the-art, geo-spatial technology in geographic information systems (GIS), global positioning systems (GPS), remote sensing, image processing, automated cartography, spatial statistics, and spatial modeling to problems with geographic dimensions. As such, a number of Geography Department faculty are affiliated with the center. Research conducted by CESAR is directed at both applied and fundamental problems in fields ranging from urban and regional planning to earth system science. This research includes comput-er-based map and image data processing and human-environment systems modeling, as well as field-based data collection. CESAR has extensive hardware, software, imaging systems, and field equipment resources in its four laboratories: (1) Richard Wright Spatial Analysis Laboratory, (2) Regional Analysis Laboratory (REGAL), (3) William Finch Remote Sensing Laboratory, and (4) Stephen and Mary Birch Foundation GIS Laboratory.

For more information about on-going research projects or services provided by CESAR or for a demonstration of its capabilities, call 619-594-5437 or e-mail tbiggs@sdsu.edu or pjankows@sdsu. edu.

## Center for European Studies

The Center for European Studies, through its associated faculty and students, is committed to the multidisciplinary study of Europe and its dynamic and evolving configuration of nations, cultures, languages, and perspectives. The center fosters an appreciation and deep understanding of Europe through grant-funded programs (e.g., colloquia, symposia, etc.), collaborative teaching and research opportunities, faculty exchanges, internship leads for partner programs, workshops, and related activities.

For more information regarding the Center for European Studies, contact the Department of European Studies at 619-594-5111.

## Center for Health Economics and Policy Studies (CHEPS)

 Joseph J. Sabia, DirectorThe Center for Health Economics and Policy Studies (CHEPS) is an interdisciplinary research center that supports impactful, policy-relevant scholarship in health economics and social policy analysis. CHEPS brings together faculty and graduate students engaged in complementary research in the areas of economic demography, the economics of crime and punishment, the economics of risky health behaviors, and national defense policy.

For more information, visit http://cheps.sdsu.edu.

## Center for Human Dynamics in the Mobile Age (HDMA)

## Ming-Hsiang Tsou, Director

The Center for Human Dynamics in the Mobile Age (HDMA) examines the transformation of innovative academic research into technological and practical software solutions for solving real world problems (such as disease outbreaks, disaster response and recovery, health disparities in cancer and obesity, drug abuse, and urban crime rates). Researchers integrate spatial science (GIS and GPS technologies), mobile applications and technologies, and big data sources to analyze real world problems in order to build transformative scientific theories and computational models for understanding human dynamics. The HDMA Center is the host institute for the big data analytics program (M.S.). For more information, please visit http://humandynamics.sdsu.edu.

## Center for Information Convergence and Strategy (CICS)

## André Skupin and Akshay Pottathil, Co-Directors

The Center for Information Convergence and Strategy (CICS), established in mid-2014, focuses on the application of modern technology in diverse domains at local, state, federal, tribal, and international levels. It supports research across related disciplines with an emphasis on data acquisition and analytics, social media solutions, strategic mapping, and systems integration and development. From visualization to predictive analytics, CICS leverages various information technologies to evaluate current trends and develop strategies based on dynamically evolving content.

To promote innovation through open collaboration, the center offers transparent interaction among government, industry, and academia by acting as a platform for transdisciplinary research and education efforts, with a focus on data mining and advanced visual techniques, as well as building strategies and solutions for government and private industry. To incubate innovation organically, CICS aims to catalyze and nurture partnerships and collaborations in strategic regions globally.

The center comprises a diverse group of faculty researchers and subject matter experts that deploy a range of methodologies, from machine learning and advanced visualization to rhetoric analysis, applied to subjects as diverse as disaster response, global security, threat reduction, business development, biomedicine, public health, and digital humanities.

For further information or to schedule a visit, see the website at http://cics.sdsu.edu. The CICS office is located in Storm Hall, Room 339.

## Center for Interdisciplinary Studies of Young People,

 Environments, Society, and Space (YESS)Stuart C. Aitken, Director
Tom Herman, Managing Director
Fernando J. Bosco, Pascale J. Marcelli, Ramona L. Perez, P.J.E. (Jenny) Quintana, Shulamit N. Riblattt, Co-Directors

YESS is an interdisciplinary collective of academic and community interests that integrates multiple approaches to foster child and youth well-being. The mission of the center is to support research on children, environments, families, society, and space. It includes not only international scholarship and global perspectives on families and young people but also local community research initiatives in San Diego and Tijuana.

The geographical contexts within which young people live structure individual lives and provide connections to social and political formations. It is important to get beyond the problematization
of "children," "families," and "communities" as categories so that we may find ways to account for the unique processes of identity formation and the relationships through which young people construct their lived spaces. Consequently, YESS supports research that is intent on raising new questions concerning the interdependence of children, caregivers, their communities, and social and spatial structures.

The center focuses on local and international research, workshops, and conferences as funding allows. It is connected to international child research centers in Africa, Asia, Europe, and Latin America. YESS sponsors the international Routledge journal, Children's Geographies: Advancing interdisciplinary understanding of younger people's lives. In addition to this international, global focus, YESS supports research in San Diego and Tijuana that relates to children, families and communities.

For information call 619-594-6498, or visit the website at http:// geog.sdsu.edu/Research/Projects/ISYS/.

## Center for Islamic and Arabic Studies

Farid Abdel-Nour, Director
The Center for Islamic and Arabic Studies administers the major and minor in Islamic and Arabic Studies. It is committed to supporting teaching and research on the lives of Muslim and Arabic-speaking peoples past and present. The center's study of the Islamic world focuses on the global context in which Islam emerged historically, the cultures and societies that it helped shape, most especially in Eurasia and Africa, and the current global condition in which people in the Islamic world situate themselves today. It sees the Arabic language as the cultural medium for diverse ways of life that are of world historical significance.

The center is multi-disciplinary and includes in its scope of study the Arabic and Persian languages and literatures; the history of Muslim and Arabic-speaking peoples; political, economic, and social dynamics of contemporary societies; art and architecture; social, political, religious, and philosophic thought; and the experience of Muslim communities in the United States and around the world. For more information, visit the website at http:// www.cias.sdsu.edu.

## Center for Latin American Studies

## Ramona L. Pérez, Director

The Center for Latin American Studies supports teaching and research related to Latin America. It has primary responsibility for the administration of the Latin American studies undergraduate and graduate degrees. It also participates in joint degree programs in international business, business administration, and public health. The center administers programs that are interdisciplinary, drawing on the expertise of an outstanding Latin Americanist faculty from the following departments and schools: Anthropology; Art and Design; English and Comparative Literature; Economics; Geography; History; Political Science; Public Affairs; Public Health; Social Work; Sociology; Spanish and Portuguese Languages and Literatures; Women's Studies; and the Fowler College of Business. In addition, the center is involved with the development of innovative methods of instruction in Mixtec, Spanish, and Zapotec; the provision of information and in-service training programs for elementary and secondary school teachers; and the provision of services for the general public through the sponsorship of conferences, workshops, lectures, and films. The center also assists in the development of the university library's Latin American holdings. The center has cooperative agreements for research, faculty, and student exchanges with several Latin American universities, particularly in Mexico, Chile, and Costa Rica.

For additional information, visit the website at http://latinamericanstudies.sdsu.edu.

## Collections Management Program (CMP)

Jaime Lennox, Interim Director
The Collections Management Program (CMP) works toward the following goals: preserving and curating historic and prehistoric anthropological, archaeological, and ethnological collections; encouraging professional and student research with the collections; promoting the preservation of these resources in partnership with Native Americans and other ethnic groups; and advocating community involvement with the collections. It meets federal and state legislation regarding care of the collections, fosters an understanding of the value and importance of the collections, and provides advanced curation management and facilities for the care of over 900 collections and several hundred thousand artifacts. For more information on CMP and internship opportunities, visit the website at http://cmp.sdsu.edu.

## Institute for Ethics and Public Affairs (IEPA)

Mark R. Wheeler, Director
The Institute for Ethics and Public Affairs (IEPA) at San Diego State University seeks to promote critical thinking about moral issues that are often complex in nature. IEPA aims to be a resource to members of the campus community, the larger community of scholars, and the greater San Diego community who wish to pursue thoughtful discussion and research as a means of clarifying moral problems. It also aims to raise the profile of the moral dimensions of contemporary issues. Housed in the Department of Philosophy, IEPA seeks interdisciplinary discussion and collaboration since clarity on contemporary moral problems often involves both the application of normative theorizing and empirical investigation. The institute organizes and sponsors a variety of programs on applied and theoretical moral issues. Among these programs are colloquia, community outreach talks, lectures, and student essay contests. Visit the website at http://ethics.sdsu.edu for details.

## Institute for Regional Studies of the Californias (IRSC)

Paul Ganster, Director
The Institute for Regional Studies of the Californias (IRSC) provides San Diego State University with a forum for the investigation, discussion, and dissemination of information about the United States-Mexican border region. Although the institute focuses on the border region of California, Baja California, the United States, and Mexico, it is also concerned with important issues of border regions elsewhere in the world.

Created in 1983, the institute has undertaken multidisciplinary applied research projects on important regional concerns including transborder environmental issues, policy perspectives of the California-Mexico relationship, quality of life, and sustainable development. IRSC also plays an active role in Mexico-related professional organizations and is frequently consulted on transborder issues by the media, nongovernmental organizations, the public sector, and other border stakeholders.

Other institute activities include conducting binational symposia; improving communication between public and private sector representatives on both sides of the border; serving as a clearinghouse for information on transborder events, issues, and institutions; and encouraging the effective use of educational resources among the region's universities. The institute serves as a major link between SDSU and Mexican universities and institutions.

IRSC has an ongoing publications program that includes books, monographs, and shorter items. Many titles are co-published with SDSU Press.

IRSC conducts applied research projects on border environmental issues and policy, regional economic issues, and transborder planning issues. For more information, visit the website at http://irsc.sdsu.edu.

## International Population Center (IPC)

John R. Weeks, Director
The International Population Center (IPC) promotes applied demographic research and the provision of technical assistance and consulting, especially focusing on population issues and policy within the San Diego/Tijuana region, the U.S.-Mexico border, Africa, and the Middle East.

Although it is located in the Department of Geography, IPC is a multidisciplinary facility, linking center faculty from several departments on campus with center associates from other organizations and universities in the San Diego region. Contact the center at 619-594-8040 or visit the website at https://ipc.sdsu.edu/.

## Language Acquisition Resource Center (LARC) National Language Training Center (LTC)

Mathias Schulze, Director
Chris Brown, Managing Director
SDSU created the Language Acquisition Resource Center (LARC) in 1989 to teach foreign languages more effectively using technology. From 1990-2014, the center served as a national Language Resource Center (LRC), with funding from the U.S. Department of Education. Since 2011, LARC functions as a national Language Training Center to train military personnel in critical world languages and cultures. SDSU-LARC executes a number of federally and state-funded projects-Project Global Officer, STARTALK, Southern Area International Languages Network-that provide opportunities for intensive training in less commonly taught languages such as Arabic, Pashto, Persian, Portuguese, and Russian, and for the training, development, and professionalization of teachers (K-16) of critical world languages in the San Diego area.

The center's staff and faculty provide professional development for teachers focused on enhancing transcultural awareness and on developing language proficiency. Its laboratories and facilities offer all faculty and instructors of the College of Arts and Letters a technology-rich environment for teaching courses, supporting self-study, and material and course design. SDSU-LARC's digital archives house learning objects, authentic materials, lesson plans, and courses for a variety of (less commonly taught) languages for different levels of language proficiency. Students and instructors use the laboratories to enhance their language-learning experience. Increasingly, these facilities are also used by classes from fields beyond language education, with a strong emphasis on digital humanities

Visit the website at http://larcnet.sdsu.edu for more information.

## Lipinsky Institute

Risa Levitt, Director
The Lipinsky Institute supports the advancement of community outreach and annual visiting Israeli professorships. To learn more, visit the website at http://jewishstudies.sdsu.edu.

## National Center for the Study of Children's Literature (NCSCL)

Joseph T. Thomas, Jr., Director
Situated in the Department of English and Comparative Literature, the National Center for the Study of Children's Literature (NCSCL) embodies SDSU's long-term commitment to the study of children's and adolescents' literatures. As one of North America's oldest and largest programs, SDSU's children's literature program employs many specialists with national and international reputations and enrolls as many as 1,000 students annually in its undergraduate classes, in its Master of Arts degree in English, specialization in children's literature, and in its Advanced Certificate in Children's/Adolescent Literature.

As a research center, the NCSCL hosts visiting scholars, sponsors annual lectures and special events, and provides faculty with the wherewithal to engage in scholarship within a collegial environment. In terms of campus and community outreach,

NCSCL faculty collaborate with other programs and departments, conduct summer programs and professional seminars for K-12 teachers, discuss books for the young in various media outlets, and speak to public and professional groups. NCSCL faculty and students also review contemporary children's/young adult books and have donated thousands of books to the SDSU library and to local school districts; these reviews and other announcements are available at http://sdsuchildlit.blogspot.com. Information about the NCSCL can be found at http://childlit.sdsu.edu.

## South Coastal Information Center (SCIC)

## Seth W. Mallios, Director

Jaime Lennox, Coordinator
The South Coastal Information Center (SCIC) promotes and ensures the preservation of historic resources in San Diego County through archaeological research, archival maintenance, and education. As the state-sponsored archaeological archive for the region, SCIC is responsible for coordinating all written and spatial information for over 50,000 archaeological sites. SCIC specializes in digital conversion and analysis and has a fully integrated archaeological Geographic Information System (GIS). Student internships are available with emphasis on the California Historical Resources Information System (CHRIS) and GIS. For more information, visit the website at http://scic.org.

## Watershed Science Institute (WSI)

Trent W. Biggs, Director
The Watershed Science Institute (WSI) promotes collaboration among SDSU researchers and communities involved in the management and regulation of land and water resources. The objective of WSI is to improve the integration of science, policy, and management of watersheds by aligning research questions with critical management needs. The regional focus is on Southern California, including San Diego County, Imperial Valley, and the US-Mexico Border region, all of which face critical challenges related to water resources and water quality, drinking water supply shortages, climate change, water quality deterioration, impaired surface water bodies, soil erosion, and coastal contamination. WSI has collaborators across the university, including faculty in biology, civil and environmental engineering, geography, mathematics and statistics, and public health, and is a university-wide institute housed in the Division of Research Affairs. Community collaborators include the City of San Diego Water Department, San Diego Coastkeeper, San Diego Regional Water Quality Control Board, San Diego River Conservancy, San Diego River Park Foundation, Southern California Coastal Water Research Project, and others. For more information, visit http://watershed.sdsu.edu.

## Social Science Research Laboratory (SSRL)

Cathy Cirina-Chiu, Director
The Social Science Research Laboratory (SSRL) provides program evaluation and survey research services to university faculty and administrators, government agencies, and non-profit organizations. SSRL has evaluated programs in a variety of areas, including public health, education, youth development, youth violence prevention, criminal justice, and public administration. In addition to program evaluation and survey research, SSRL's services include research design, data analysis, data visualization, and writing evaluation components for grant proposals.

SSRL also provides training to SDSU students through its Internship in Applied Survey Research and Program Evaluation. The goal of the internship is to provide eligible students with field experience and an opportunity to apply the information and skills learned in their academic curriculum in a real-world setting.

SSRL is located in the College of Arts and Letters, Room 374. For more information, call 619-594-1363 or visit: http://ssrl.sdsu. edu.

# Fowler College of Business 

The Fowler College of Business and the Charles W. Lamden School of Accountancy are accredited by AACSB Inter-national-The Association to Advance Collegiate Schools of Business-at both the undergraduate and graduate levels. Several Fowler College of Business programs are registered with the Certified Financial Planner Board of Standards. Visit the Fowler College of Business website at https://business. sdsu.edu/bac.

## Administration

Dean: Bruce A. Reinig (Interim)
Senior Associate Dean: George E. Belch
Associate Dean for Academic Affairs: David P. Ely
Assistant Dean for Student Affairs: Kristie A. Dock
Director of Graduate Programs: Steven L. Gill
Director of Undergraduate Programs: Jaemin Kim
Director of Graduate Career Management
Center: Beverly K. Bracker
Director of Resource Management: Davette Kawachi

## Mission of the Fowler College of Business

The mission of the Fowler College of Business at SDSU is to educate, empower, and engage undergraduate and graduate students, and transform them into effective business professionals. This is done by developing and delivering educational programs that reflect the international, entrepreneurial, and diverse character of our region. Through faculty research, we make intellectual contributions that impact the academic and business communities.

## General Information

The Fowler College of Business is committed to being a leading business school through the creation and dissemination of knowledge. The college is guided by the following goals: (1) elevate instructional excellence; (2) ensure student preparation and success; (3) enhance faculty discovery, innovation, and research; (4) stimulate thought leadership for public impact; (5) invest for excellence in people; (6) develop financial and resource strength; and (7) build our reputational capital. The college has enjoyed programmatic accreditation since 1959.

The college is organized into five academic units: the Charles W. Lamden School of Accountancy and the departments of finance, management, management information systems, and marketing.

## Curricula Offered

Refer to the Courses and Curricula section of this catalog for a complete listing of program requirements and courses offered by departments within the Fowler College of Business.

## Master's Degrees

Accountancy (M.S.), Business Administration (M.S.), Business Administration (M.B.A., M.B.A./J.D.; jointly with the California Western School of Law, M.B.A./J.D.; jointly with the Thomas Jefferson School of Law), Cybersecurity Management (M.S.); Global Business Development (M.S.); Information Systems (M.S.), Latin American Studies (M.B.A./M.A.; jointly with the College of Arts and Letters).

## Bachelor's Degrees

Accounting (B.S.), Business Administration (B.S.), Finance (B.S.), Financial Services (B.S.), Information Systems (B.S.), International Business (B.A.; jointly with the College of Arts and Letters), Management (B.S.), Marketing (B.S.), Real Estate (B.S.).

## Minors

Accounting, Business Administration, Entrepreneurship, Finance, Information Systems, Management, Marketing, Real Estate.

## Certificate Programs

Business Administration (available at SDSU Imperial Valley only), Data Analytics, Executive Financial Planner, Personal Financial Planning, Taxation.

## Research Centers and Institutes

## Center for Accounting in the Public Interest

Steven L. Gill, Interim Director
The Center for Accounting in the Public Interest (CAPI) was established in 2006 and received its first grant from the President's Leadership Fund. The center provides online resources and communication through the website at http://capi.sdsu.edu.

## Center for Advancing Global Business (CAGB)

Mark J. Ballam, Managing Director
Martina Musteen, Faculty Director
Nancy K. Nicholson, Senior Project Consultant
Zena Yang, Center Coordinator
San Diego State University's Center for Advancing Global Business (CAGB), established in 2019, serves as the catalyst for global thought leadership by connecting academia with international commerce. CAGB houses SDSU's Center for International Business Education and Research (SDSU CIBER) and the Charles W. Hostler Institute on World Affairs.

CAGB is located in the Fowler College of Business and collaborates with programs and colleges across the university. For more information, visit https://business.sdsu.edu/students/cagb.

## Center for International Business Education

## and Research (CIBER)

Mark J. Ballam, Managing Director
Martina Musteen, Faculty Director
Nancy K. Nicholson, Senior Project Consultant
Zena Yang, Center Coordinator
San Diego State University's Center for International Business Education and Research (SDSU CIBER) is a national center of excellence funded, in part, by a grant from the U.S. Department of Education. The overall mission of the national CIBER program is to help ensure the United States' long-term international competitiveness by supporting research, education, and outreach activities.

One of 15 centers nationwide, SDSU CIBER was one of the first five established in 1989 and assists in linking the manpower and information needs of U.S. business with the international education, language training, and research capacities of universities across the nation. SDSU CIBER serves as a catalyst to further integrate and advance a number of diverse activities relating to international business education and research. Activities of SDSU CIBER include support for faculty research, international business and foreign language curricular initiatives, outreach and development programs for the business community, and training programs for language and business faculty. SDSU CIBER also organizes conferences, workshops, and seminars designed to improve our nation's capacity to compete in the global economy.

SDSU CIBER is located in the Fowler College of Business and collaborates with programs and colleges across the university. For more information, visit https://business.sdsu.edu/students/ciber.

## Center for the Study of Personal Financial Planning (CSPFP)

Thomas M.D. Warschauer, Interim Director
The center encourages research in individual and family finance to further the ability of financial counselors and planners to provide advice that aids in achieving their financial objectives.

The theoretical base of decision-making criteria for personal financial decisions is weak and sometimes non-existent. In many cases, individuals, families, and their financial planners and advisers make important decisions that have little or no theoretical foundation. The finance discipline - as taught at the university-level - has grown around corporate decision-making, not decisions of the household. The development of an emerging financial planning profession has made this lack of theoretical basis evident. The center is founded on the belief that there is a significant need for scholars to share their ideas and mutually develop their research thoughts, for financial reporters to bring the practical application of this work to the attention of professionals and the public, and for students engaged in the study of financial planning to be aware of the latest findings of researchers engaged in this field.

The center is involved in the development of a national webbased research database and a national graduate student financial
planning competition. The financial planning web-based bibliography is aimed at three groups of users: journalists, researchers, and students. Summaries of recent research in financial planning concepts is available for journalists to help disseminate research findings to the popular press. Researchers can find background articles listed by financial planning topical areas. Faculty can determine state of the art research on various topics by sharing research interests and/or discussion drafts. And nationally, students can access research to aid in their academic understanding of financial planning issues.

The center can be reached at tom.warschauer@sdsu.edu.

## Charles W. Hostler Institute on World Affairs

Nancy K. Nicholson, Director
Martina Musteen, Charles W. Hostler Professor of Global Business
The Charles W. Hostler Institute on World Affairs plays a critical role in providing a global perspective as part of the educational mission of SDSU. It was founded in 1942 as the Institute on World Affairs to inform faculty, students, and the wider public on global affairs. The Hostler Institute has provided SDSU and the greater San Diego community with high-level and spirited intellectual engagement on a number of international issues and controversies. The institute hosts events throughout the year as well as a course on global business and diplomacy, which is offered in the spring semester.

The Hostler Institute is located in the Fowler College of Business and collaborates with programs and colleges across the university. For more information, visit https://business.sdsu.edu/students/ hostler.

## The Corky McMillin Center for Real Estate (CMCRE)

Edward F. Pierzak, Director
The Corky McMillin Center for Real Estate, part of the Fowler College of Business at SDSU, has a history, tradition, and commitment to teaching real estate. The program began in 1958 and continues to produce real estate graduates who are ready on day one. In order to contribute to the education of the next generation of real estate leaders, the McMillin family, along with HG Fenton, Cassidy Turley, and Cornerstone Communities, generously decided to give back and support real estate education by forming the Corky McMillin Center for Real Estate. The center provides students with excellent opportunities to engage with with real estate professionals and participate in supplemental education sessions such as Argus training, CoStar, and Excel modeling. For more information, please contact the center at realestate@sdsu.edu.

## Corporate Governance Institute (CGI)

## Lori Verstegen Ryan, Director

The Corporate Governance Institute (CGI) is an education and research center dedicated to the study and application of responsible corporate governance principles worldwide. Founded in 1998, the mission of the CGI is to enhance the skills of corporate directors, investors, and senior executives by developing innovative curriculum, fostering cutting-edge research, and offering influential practitioner education. CGI programs focus on identifying and applying ethical corporate governance practices and are guided by the principle that corporate leaders have a primary duty to ensure the financial viability of the organizations that they manage.

CGI was a first-mover in the development and delivery of a dedicated corporate governance course to MBA students in 1999, followed by a required corporate governance course for all Executive MBA students in 2007. For more than a decade, CGI has held dedicated symposia and annual research events for an international network of corporate governance scholars. The institute also offers lectures and panels for students, faculty, and the public, featuring such prestigious corporate executives, directors, and investors as the CEOs of Home Depot and Allergan Inc.; chairmen of the boards of CVS Caremark, Hewlett-Packard, Allergan Inc., and Chesapeake Energy; and Relational Investors founders David Batchelder and Ralph Whitworth.

For more information concerning CGI's programs, e-mail CGI@ SDSU.edu, call 619-594-5314, or visit https://business.sdsu.edu/cgi.

## Institute for Inclusiveness and Diversity

 in Organizations (IIDO)
## Beth G. Chung, Director

The purpose of the Institute for Inclusiveness and Diversity in Organizations (IIDO) is to support the development of knowledge and competencies needed to manage a more diverse workforce in
a global business environment. Diversity is viewed here in broad terms, incorporating age, ethnicity, disability, sexual orientation, culture, and nationality. Both the changing nature of the work force and the global challenges faced by organizations point to the value of researching inclusion and diversity issues. This information deepens the body of knowledge about organizational diversity for management scholars, presents needed information to the business community, provides research opportunities for faculty, and offers educational opportunities for students. Founded in 2006, the IIDO seeks to accomplish these goals by: (1) conducting survey research that investigates the impact of organizational diversity and globalization, with the goal of improving organizational effectiveness; (2) cultivating mutually beneficial relationships with organizations (private sector, public sector, and nonprofit) that support the goals of optimizing human resource management and development in a diverse and interconnected world; and (3) contributing to the education of students, employees, managers, and executives to prepare them for roles in an increasingly diverse and global world. The IIDO also seeks to create research partnerships among faculty at SDSU and at other universities to enhance the knowledge base on inclusion, and to increase the international reputation and visibility of the Fowler College of Business among scholars and the business community. For further information, contact the IIDO at 619-594-2699, Beth.Chung@sdsu.edu, or at https://business.sdsu. edu/iido.

## Lavin Entrepreneurship Center

## Alex F. DeNoble, Executive Director

Bernhard Schroeder, Director, Lavin Center Programs
The Lavin Entrepreneurship Center serves students and startup companies that contribute to the emerging growth sector of the regional business community. The mission of the Lavin Center is to develop educational and experiential programs and research focused on best practices that promote entrepreneurship and innovation at the individual and organizational levels.

The range of entrepreneurial programs offered includes:

1. mentorship and advisory support to help students acquire the tools and skills necessary for new venture creation and development;
2. intern programs to provide experiential education for undergraduate and graduate students; and
3. experiential programs, workshops, and competitions to help students foster the creation of startup companies.
The Lavin Center focuses its program development on all areas of the entrepreneurial process including: investor financing, product innovation, management of technology, managing organizational growth, succession planning, leadership, talent management, branding and positioning, social media marketing, and estate planning.

The Lavin Center sponsors and creates a myriad of programs and events at San Diego State University aimed at the campus population:

- Launchln, featuring an entrepreneur panel and 50 startups on the campus hiring students;
- LeanModel Competition, start-up global business model university competition;
- California Entrepreneurship Educators Conference, bringing thought leaders together to further entrepreneurship;
- QUALCOMM Social Entrepreneur Internship program; students helping non-profits;
- Venture Capital Investment Competition, preparing students for venture based activities;
- WebCompass, an undergraduate internship building websites for local companies;
- L. Robert Payne Distinguished Entrepreneur Lecture Series;
- VentureStart Competition, on campus business model competition for all SDSU students;
- Lavin Entrepreneurs, a two-year undergraduate cohort with mentoring by entrenpreneurs;
- Entrepreneur Day, yearly campus wide celebration of SDSU student entrepreneurs;
- Entrepreneurs Study Abroad; melding courses, students, and entrepreneurs in international settings.
For further information, contact the Lavin Entrepreneurship Center in the Engineering and Interdisciplinary Sciences Complex, Suite 103, 619-594-2781, and at http://lavincenter.sdsu.edu.


## College of Education

## Administration

Dean: Y. Barry Chung
Senior Associate Dean: Karen S. Myers-Bowman
Associate Dean for Diversity
and International Affairs: Cristian R. Aquino-Sterling
Assistant Dean for Student Affairs: Patricia Lozada-Santone
Doctoral Programs:
Wendy S. Bracken, Marva G. Cappello, Joanne E. Lobato, James M. Marshall
Executive Director, College Avenue Compact: Melissa Naranjo
Director of Office for Student Success: Lisa F. McCully
Manager of Budget and Analysis: Julie A. White
Operations and Support Services Analyst: Elsa Tapia

## General Information

The College of Education's mission is to prepare effective professionals for a variety of societal service delivery and leadership roles across a range of settings including schools, postsecondary institutions, social service agencies, and vocational rehabilitation organizations. The college contributes to the knowledge base in both educational theory and practice through professional inquiry and scholarship. The college engages in strategic partnerships with the field of practice to improve client outcomes, to increase institutional effectiveness, and to promote social justice.

The College of Education is organized into seven academic units including the School of Teacher Education and the following departments: Administration, Rehabilitation and Postsecondary Education; Child and Family Development; Counseling and School Psychology; Dual Language and English Learner Education; Educational Leadership; and Special Education. The Master of Arts degree in education is offered in ten academic areas of education. The Master of Science degree is offered in three additional academic areas. The Educational Specialist degree is offered in school psychology. A Ph.D. program in education is offered jointly with Claremont Graduate University. This unique program features a social justice emphasis. A Ph.D. program in mathematics and science education is offered jointly with the College of Sciences and the University of California, San Diego. An Ed.D. program is offered in Educational Leadership with concentrations in PreK-12 and Community College/Postsecondary Leadership. Approved teaching credential programs are offered for the multiple subject credential and the single subject credential, as well as for a number of specialist and service credentials.

## Curricula Offered

Refer to the Courses and Curricula section of this catalog for a complete listing of program requirements and courses offered by departments within the College of Education.

## Doctoral Programs

Education (Ph.D.), Mathematics and Science Education (Ph.D.), Educational Leadership (Ed.D.: Concentration in Community College/Postsecondary Leadership; Concentration in PreK-12 School Leadership), Educational Specialist in School Psychology (Ed.S.).

## Master's Degrees

Child Development (M.S.), Counseling (M.S.), Education (M.A., M.A.T.), Rehabilitation Counseling (M.S.).

## Bachelor's Degrees

Child Development (B.S.), Liberal Studies (B.A.).

## Minors

Child Development, Counseling and Social Change, Cultural Proficiency, Leadership Development.

## Teaching and Service Credentials*

1. Multiple Subject. Teach in self-contained classrooms and provide Specially Designed Academic Instruction in English (SDAIE) and English Language Development (ELD), kindergarten through sixth grade.
2. Multiple Subject Bilingual. Teach in self-contained kindergarten through sixth grade classrooms and in primary language of emphasis and English, English Language Development (ELD), and Specially Designed Academic Instruction in English (SDAIE).
3. Single Subject. Teach single subject area grades 6 through 12 and provide Specially Designed Academic Instruction in English (SDAIE) and English Language Development (ELD).
4. Single Subject Bilingual. Teach in single subject classrooms grades 6 through 12 in primary language of emphasis and English in kindergarten through 12th grade and provide Specially Designed Academic Instruction in English (SDAIE) and English Language Development (ELD).
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*Standards and authorizations are being reviewed and revised by the
California Commission on Teacher Credentialing.
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## Added Authorizations

## Early Childhood Special Education

Reading and Literacy

## Specialist Credentials

Reading and Literacy Leadership
Special Education: Early Childhood Special Education, Preliminary and Clear; Internship Credential
Mild/Moderate Disabilities, Preliminary and Clear; Internship Credential
Moderate/Severe Disabilities, Preliminary and Clear; Internship Credential

## Service Credentials

Administrative Services; Internship (Department of Educational Leadership)
Clinical - Rehabilitative Services
(School of Speech, Language, and Hearing Sciences)
Pupil Personnel Services:
Child Welfare and Attendance (School of Social Work)
School Counseling
(Department of Counseling and School Psychology)
School Psychology (Department of Counseling and School Psychology); Internship Credential
School Social Work (School of Social Work)
School Nurse Services (School of Nursing)

## Certificate Programs

Behavior Analysis, Cognitive Disabilities, Community College Teaching, Bilingual (Spanish) Special Education, Developing Gifted Potential, DistanceEducation, Dual LanguageforAcademic Literacy, Early Care and Education, Early Childhood Transdisciplinary Education and Mental Health, English Language Development for Academic Literacy, Family Life Education, Instructional Design, Instructional Technology, Psychiatric Rehabilitation, Reading and Literacy Added Authorization, Rehabilitation Administration, Rehabilitation Counseling, Rehabilitation Technology (offered with College of Engineering), Restorative Justice Practice and TraumaInformed Care, Supported Employment and Transition Specialist, Workforce Education and Lifelong Learning.

## Research Centers and Institutes

## California Global Education Project (CGEP)

## Emily M. Schell, Interim Director

The California Global Education Project (CGEP) supports the twin SDSU priorities of community outreach and internationalization through the promotion of international studies education in our schools and community. Programs designed to improve teaching and learning at the pre-collegiate level are emphasized, with particular foci on the social sciences and humanities as they relate to international, cross-cultural, and citizenship education within both the domestic American and wider global context.

CGEP programs are multidisciplinary and collaborative in nature, involving partnerships with other SDSU academic departments, centers and institutes, as well as with other educational institutions and community groups. Programs include in-service teacher training and professional development workshops and institutes, curriculum development, student-focused programs, and partnerships with schools and districts. The CGEP Instructional Resource Center is a "demonstration" collection of K-16 instructional materials in global issues, world areas and cultures, and cross-cultural education available to SDSU students and educators throughout San Diego County.

For more information, visit CGEP's website at http://cgep.sdsu. edu.

## Center for Counseling and School Psychology

Brent A. Taylor, Director
The Center for Counseling and School Psychology is a unit within the College of Education designed to provide support for activities such as (1) securing and administering grants and other support for research and development in counseling and school psychology, (2) encouraging cooperation with faculty members from other relevant disciplines such as anthropology, economics, psychology, social work, sociology, and Counseling and Psychological Services, and (3) conducting programs or rendering services designed to promote counseling and school psychology at San Diego State University. The center is administered by the Department of Counseling and School Psychology; fiscal matters are coordinated through the San Diego State University Foundation.

## Center for Equity and Biliteracy Education Research (CEBER)

Cristina M. Alfaro, Karen Cadiero-Kaplan, Alberto M. Ochoa, Co-Directors

The Center for Equity and Biliteracy Education Research (CEBER) examines structural, social, and linguistic conditions that hinder or promote the advancement of democratic schooling and educational social justice for all students. CEBER aims to bring together scholars and education and community leaders to assist in the advancement of knowledge regarding biliteracy and equity issues. Six components guide the work of CEBER: professional development and biliteracy teacher education, equity and biliteracy research on democratic schooling, international professional development of school personnel, biliteracy capacity from kindergarten to higher education, parental leadership in biliteracy, and dissemination of educational equity and biliteracy research.

## Center for Family, School, and Community Engagement

 Shulamit N. Ritblatt, DirectorThe mission of the Center for Family, School, and Community Engagement (CFSCE) is to build the capacity of families, educators, and community partners to advance the education and social emotional well-being of children. The center provides platforms for engaging in collaborative problem solving, leadership development for parents and educators to work together, and through new research that shines a light on partnership practices to support the healthy development and school success of children from "cradle through college." The goal of CFSCE is to engage its community and change lives by putting knowledge and skills to work in order to solve the most chronic and persistent educational and relational problems. The CFSCE promotes trauma-informed practices in schools and serves as a leadership-building institute for parents at low-achieving schools, as a family engagement "laboratory" for educators working to turn low-achieving schools around, and
a source for researching, evaluating, and sharing the best fami-ly-school-community engagement practices for improving student outcomes.

## Center for Research in Mathematics and Science Education (CRMSE)

Randolph A. Philipp, Director
William C. Zahner, Associate Director
The Center for Research in Mathematics and Science Education (CRMSE) is an interdisciplinary consortium of faculty interested in research on substantive questions related to the learning and teaching of science and mathematics. The center was established in the College of Sciences in 1986 and became an interdisciplinary center with the College of Education in 1987. The center currently has members from the faculties of biology, dual language and English learner education, mathematics and statistics, physics, psychology, and teacher education. CRMSE is administered by a director and an associate director, who are appointed by the deans of the Colleges of Sciences and Education, in consultation with CRMSE members. Through its activities, CRMSE initiates, encourages, and supports the scholarly pursuit of important theoretical and applied problems in mathematics and science education. CRMSE supports faculty in their current research projects and in the preparation of manuscripts for publication and grant proposals for continued research. The center houses the Doctoral Program in Mathematics and Science Education (MSED) that is offered jointly by SDSU and the University of California, San Diego. It also houses the Professional Development Collaborative to serve area teachers.

The main office of the center is located at 6475 Alvarado Road, Suite 206, San Diego, CA 92120-5013. For more information, contact 619-594-1579. The center may also be reached via campus Mail Code 1862 and at http://crmse.sdsu.edu.

## Center for Social Equity Technical Assistance

## Alberto M. Ochoa, Director

The center conducts training and research on issues of social equity and bilingual/multicultural policy, and provides technical assistance to districts throughout southern California. The center conducts research in public equity and school finance. The center houses projects funded by federal, state, and private sources. Current projects include the Parent Leadership and the Social Equity project. The center functions within the SDSU Department of Dual Language and English Learner Education.

## Center for the Study of International Education

Patricia Lozada-Santone, Sarah Maheronnaghsh, Jacki Booth, Co-Directors

The Center for the Study of International Education is a unit of the College of Education. It promotes faculty and graduate student research, explores study abroad and exchange possibilities for faculty and students, and disseminates information about international education to interested persons in the San Diego area. It also seeks to complement regular course offerings through sponsorship of lectures, conferences, and the development of bibliographic resources.

The center seeks to foster not only a network of interested faculty within the College of Education, but also encourages faculty involvement from other colleges on campus as well as from other organizations and universities in the San Diego area.

## Center for Teaching Critical Thinking and Creativity

Luke S. Duesbery, Director
The Center for Teaching Critical Thinking and Creativity (CTCTC) advances performance and productivity in diverse communities by enhancing critical and creative thinking in schools. The center collaborates with teachers to develop and evaluate applications of research on critical and creative thinking applied to rigorous content and supported by appropriate technologies. CTCTC supports teachers' continued development of their own expertise while taking advantage of their knowledge, skills, and experience in assessing effects on students' critical thinking, creative productivity, and academic performance.

## Interwork Institute

Caren L. Sax, Director
Interwork Institute's efforts focus on promoting the integration of all individuals, including those with disabilities, into all aspects of education, work, family, and community life. The institute conducts research, training, and education using a variety of strategies including distance-learning technologies. Current efforts include universal design in all aspects of our community. Educational and research efforts involve organizations and individuals in all states, tribal communities, the Pacific Basin, Asia, Mexico, South America, and Europe. Faculty and staff associated with the institute are uniquely prepared to promote the meaningful participation and productivity of each member of the community.

The institute has the following six centers:

- The Center for Educational Leadership, Innovation, and Policy examines issues that affect policies and practices of educational institutions, including their implications for leadership, planning, innovation, and organizational development. The center engages in research, development, and dissemination activities that focus on a few critical educational issues. As a result of its policy analysis and research, the center develops plans and programs which enhance organizational capacity to respond to the challenges and opportunities and which lead to the improvement of practice.
- The Minority Male Community College Collaborative (M2C3) was established with a grant from the SDSU President's Leadership Fund. The goal is to partner with community colleges across the U.S. to enhance access, achievement, and success among minority male community college students. M2C3's research and practice agenda prioritizes men who have been traditionally underrepresented and undeserved in postsecondary education
- The Center for Pacific Studies (CPS) provides research, training, and technical assistance services in partnership with institutions of higher education, government agencies, and nonprofit organizations in the following Pacific Island jurisdictions: American Samoa, Republic of the Marshall Islands, Federated States of Micronesia, Territory of Guam, Commonwealth of the Northern Marianas Islands, Republic of Palau, and the State of Hawaii.
- Circle for American Indian Rehabilitation (CAIR) is devoted to the continuing education, training, and technical assistance needs for programs funded through American Indian Rehabilitation Service Projects (Section 121 of the Rehabilitation Act).
- The Collaborative for Distance Learning (CDL) provides the technology and instructional design support for all Department and Interwork activities. This has been in operation since 1993 when initial funding was received from the US Department of Education.
- The Exceptional Family Resource Center (EFRC) was initially developed under the Department of Special Education. It was transferred to the Interwork Institute in 2006. They have been serving individuals and families of children with disabilities and the professionals who assist them throughout San Diego and Imperial Counties since 1990.
The Interwork Institute's facilities are located at 6367 Alvarado Court, Suite 350. For more information, visit the website at http:// interwork.sdsu.edu.


## National Center for Urban School <br> Transformation (NCUST)

Joseph F. Johnson, Executive Director
The National Center for Urban School Transformation (NCUST) helps school districts transform urban schools into places where all students achieve academic proficiency, evidence a love of learning, and graduate prepared to succeed in post-secondary education, the workplace, and their communities. The center pursues this mission through the following strategies:

- Strategy 1: Identify, celebrate, and study urban schools and districts that are transforming teaching and learning, as evidenced by excellent learning results for all students;
- Strategy 2: Engage in focused, long-term partnerships that support urban school districts as they endeavor to create model, high-performing schools;
- Strategy 3: Disseminate useful information about effective strategies to transform urban schools.

NCUST staff members develop articles, reports, book chapters, and books that feature information learned through both Strategies 1 and 2. The center supports SDSU doctoral students in educational leadership and SDSU faculty as they pursue research designed to deepen the knowledge base concerning high-performing urban schools. The NCUST website (http://www.ncust.org) is a nationally known source of information about effective strategies for transforming urban schools.

## Pre-College Institute (PCI)

Cynthia D. Park, Executive Director
The SDSU Pre-College Institute ( PCI ) promotes college access and completion for underserved students, implements innovative programs to enhance excellence in teaching and learning in multicultural settings, and studies their outcomes. Founded in 1983, PCI provides an invaluable service to our communities' multicultural low-income, underrepresented, and underserved students. The faculty and staff of PCI believe that students can achieve their potential by enrolling in and completing a postsecondary program of their choice. Through multiple federally funded grants, our students receive academic advising, mentoring, personal and financial counseling, personalized college preparation, summer supplemental instruction, and tutorial assistance throughout their high school career. The institute, operating from the university's historic strength in teacher education and its proximity to Mexico, works closely with parents, principals, school counselors, teachers, and SDSU undergraduates to decrease the achievement gap between high- and low-performing schools. The institute supports continuous growth of its faculty and staff through a systematic professional development program.

The institute also offers services through its partnerships with the City Heights Educational Collaborative, the Division of Academic Engagement and Student Achievement, Office of Financial Aid and Scholarships, and the Colleges of Sciences and Health and Human Services. The Pathways Office, through a partnership with PCl , the College of Education, and the Office of Financial Aid and Scholarships, provides current SDSU students with a ser-vice-learning opportunity to work as tutors at our partner school sites to provide in-class and afterschool tutoring. Tutors enroll in Education 201 and/or Teacher Education 362. Many of our tutors are interested in pursuing a career in teaching or education. The Pathways Office tutors are near-peer leaders and often serve as mentors to the students they tutor. The office recruits and trains approximately 120 volunteer and work-study eligible students per academic year. America Counts tutors work with middle and high school students on mathematics and science. America Reads tutors promote early literacy for kindergarten through third grade. All tutors attend tutor training and participate in monthly professional development seminars.

For more information, please access our website at http://pci. sdsu.edu/education/pci.

## San Diego State University Literacy Center

Katherine Sciurba, Director
The SDSU Literacy Center supports collaborative partnerships that serve a variety of diverse literacy needs in our community including assessment and tutoring in reading and writing for children, adolescents, and adults; workshops for parents to promote family literacy; professional education for teachers through coursework and institutes; and, research to inform teaching practice and effect systemic change in literacy education. The center houses the Community Reading Clinic. Credentialed teachers enrolled in graduate reading, Reading and Literacy Added Authorization, and Reading and Literacy Leadership Specialist credential programs, as well as professional staff, conduct tutoring and assessments. Professional development for reading recovery teacher leaders occurs at the center, and institutes are planned for reading recovery and elementary teachers in the community. Literacy center faculty members engage in research on effective instruction in reading and writing, teacher practices, and early intervention. The SDSU Literacy Center is located in City Heights in the Dede Alpert Center for Community Engagement, San Diego State University, 4283 El Cajon Blvd., Suite 200, San Diego, CA 92105. For more information, visit http://edweb.sdsu.edu/literacy/.

# College of Engineering 

## Administration

Dean: Eugene A. Olevsky
Associate Dean for Graduate Studies and Research:
Temesgen Garoma Ararsso (Interim)
Associate Dean for Undergraduate Studies:
Yusef Ozturk (Interim)
Assistant Dean for Student Affairs: Theresa M. Garcia Director of Veterans Internship: Brittany Field

## General Information

The College of Engineering was established as a distinct unit of the university in 1958, although first courses named "Engineering" appeared in the 1922-23 catalog. The 1942-43 catalog was the first to announce the establishment of a "General Engineering" program leading to the Bachelor of Arts degree. The college is now organized into the Departments of Aerospace Engineering, Civil, Construction, and Environmental Engineering, Electrical and Computer Engineering, and Mechanical Engineering.

At the undergraduate level, the College of Engineering prescribes certain patterns of its courses, combined with those of other academic divisions of the university, leading to the Bachelor of Science degree in seven specific major fields of engineering. At the graduate level, the college offers the Master of Science degree in four of these fields and in bioengineering, a Master of Engineering degree, and doctoral degrees in bioengineering, electrical and computer engineering, mechanical and aerospace engineering, and structural engineering jointly with the University of California, San Diego.

Consistent with the role and mission of the California State University system, the faculty of the College of Engineering at San Diego State University believes its mission is to provide students with a quality undergraduate and graduate engineering education; to prepare graduates for professional careers and life-long learning; to promote the creation and dissemination of knowledge; to serve society through professional practice and community outreach; and to act as a catalyst for the technological development of the San Diego region.

Because the engineer's work is predominantly intellectual and varied, and not of a routine mental or physical character, this program places emphasis on the mastery of a strong core of subject matter in the physical sciences, mathematics, and the engineering sciences of broad applicability. Woven throughout the pattern is a continuing study of the social facets of our civilization, because engineering graduates must expect to find their best expression as leaders, conscious of the social and economic implications of their decisions.

Although the profession of engineering presents in practice a variety of specialties, undergraduate students initially focus their attention on a pattern of coursework emphasizing engineering fundamentals. Students then are able to apply this knowledge of fundamentals in developing special expertise in their areas of specific interest.

## Accreditation and Academic Association

The College of Engineering is a member of the American Society for Engineering Education. Undergraduate programs in aerospace engineering, civil engineering, computer engineering, construction engineering, electrical engineering, environmental engineering, and mechanical engineering are accredited by the Engineering Accreditation Commission (EAC) of ABET, http:// www.abet.org.

## Registration of Engineers

Professional registration of engineers is required for many fields of practice. Engineering students are encouraged to take the Fundamentals of Engineering examination prior to graduation. Graduation from an accreditation program such as San Diego State University facilitates registration as a Professional Engineer.

## Curricula Offered

Refer to the Courses and Curricula section of this catalog for a complete listing of program requirements and courses offered by departments within the College of Engineering.

## Doctoral Programs

Engineering Sciences:
Bioengineering (Ph.D.), Electrical and Computer Engineering (Ph.D.), Mechanical and Aerospace Engineering (Ph.D.), Structural Engineering (Ph.D.).

## Master's Degrees

Aerospace Engineering (M.S.), Bioengineering (M.S.), Civil Engineering (M.S.), Electrical Engineering (M.S.), Mechanical Engineering (M.S.), Master of Engineering (M.Engr.).

## Bachelor's Degrees

Aerospace Engineering (B.S.), Civil Engineering (B.S.), Computer Engineering (B.S.), Construction Engineering (B.S.), Electrical Engineering (B.S.), Environmental Engineering (B.S.), Mechanical Engineering (B.S.)

## Minor

Engineering

## Certificate Program

Rehabilitation Technology (offered with College of Education)

## Research Centers and Institutes

Center for Electric Drive Transportation (CEDT)
Chunting C. Mi, Director
The Center for Electric Drive Transportation (CEDT) was established in 2011 with a grant from the U.S. Department of Energy Graduate Automotive Technology Education (GATE) program. The GATE initiative awarded $\$ 6.4$ million over the course of five years to support seven Centers of Excellence at American universities. The center focuses on three critical automotive technology areas: hybrid propulsion, energy storage, and lightweight materials. CEDT is dedicated to achieving the synergy among technological development, research, and graduate education in automotive engineering.

## Center for Industrial Training and Engineering Research (CITER)

Gustaaf B. Jacobs, Director
The Center for Industrial Training and Engineering Research (CITER) structures and enhances collaboration between industrial partners and SDSU. The primary objective is to connect SDSU engineering departments, faculty members, undergraduate, and graduate students with engineers and staff scientists of local industry. For more information, visit http://citer.sdsu.edu/citer.

## Center for Neural Technology (CNT - NSF ERC)

Samuel K. Kassegne, Deputy Director
The Center for Neural Technology is one of several Engineering Research Centers (ERCs) around the country funded by the National Science Foundation (NSF). The center is based at the University of Washington. San Diego State University, along with
the Massachusetts Institute of Technology, are core partners of the center. The vision of the center is to revolutionize the treatment of spinal cord injury, stroke, and other debilitating neurological conditions by developing neural devices that will assist, improve, and restore sensory and motor function (http://www. csne-erc.org).

## Center for Renewable Energy and Energy

## Efficiency (REEE)

Asfaw Beyene, Director
The Center for Renewable Energy and Energy Efficiency (REEE) has supported educational and research activities in energy related areas since 1985. Undergraduate and graduate students and faculty from the mechanical engineering and electrical and computer engineering departments are involved in obtaining solutions to problems presented by industrial sponsors. Institute research projects cover a wide range of areas from optimizing energy resources to international energy studies. For more information, visit http://reee.sdsu.edu.

## Communication Systems and Signal Processing

 Institute (COSSPI)Madhu S. Gupta, Director
This institute is engaged in educational, research, and service activities in the field of electronic communication systems, with an emphasis on radio frequency and digital signal processing aspects. Faculty, students, and industrial partners collaborate to advance the state-of-the-art in the institute's core areas of expertise, such as RF devices and integrated circuits, modems, receivers, transmitters, synthesizers, A-D and D-A converters, digital signal processing algorithms and hardware, antenna, and communication networks. Specific activities include research and design projects; development of products, software, algorithms, and techniques; and training programs including short courses. For more information, visit https://electrical.sdsu.edu/COSSPI.php.

## Concrete Research Institute

Mohamad Ziad Bayasi, Director
The Concrete Research Institute supports educational needs in civil engineering curriculum and concrete research performed for sponsors from industry and governments. The institute encompasses a wide range of topics. The main emphasis is currently on concrete materials and structures. Civil and environmental engineering faculty members are involved with finding optimum design solutions in bridges, seismic resistant structures, residential buildings, and retaining walls. For more information, visit http://www.engineering.sdsu.edu/research/institutescenters.aspx.

## Industrial Assessment Center (IAC)

Asfaw Beyene, Director
SDSU Industrial Assessment Center (IAC) is a program funded by the U.S. Department of Energy with a primary goal of (1) training the next generation of energy engineers by providing hands-on experience to undergraduate and graduate students and (2) promoting energy efficiency through service to small- and medi-um-sized manufacturing plants as well as other buildings with extensive energy use. The combined impact of these goals is expected to create clean jobs, enhance the competitiveness of U.S. industry in the global marketplace, help reduce the country's energy dependency, and promote clean environment by reducing emissions. For more information, visit https://iac.sdsu.edu.

## Smart Health Institute

Kee S. Moon and Yusuf Ozturk, Co-Directors
Smart Health Institute establishes an area of excellence focused on enhancing research infrastructure to facilitate research and support education in fundamental sensor technologies, wireless net-working algorithms, machine learning, decision support systems, and smart medical treatment methods. The center responds to the need for high quality, economically efficient healthcare that is rapidly becoming one of the key economic, scientific, and societal challenges. For more information, visit https://smarthealth. sdsu.edu/.

# College of Health and Human Services 

## Administration

## Dean: Steven P. Hooker

Associate Dean: Mark B. Reed
Associate Dean for Academic Affairs: Sonja L. Pruitt-Lord
Assistant Dean for Student Affairs: Jason Ramirez
Director of Development: Natasha Bliss
Director of Research Management: Terry L. Williams
International Programs Coordinator: Roxanne Riedel

## General Information

The College of Health and Human Services offers professional education in the health and human service disciplines. The college consists of the following group of professional areas: the School of Exercise and Nutritional Sciences, School of Nursing, School of Social Work, School of Speech, Language, and Hearing Sciences, and the School of Public Health.

The College of Health and Human Services' faculty, through advising, teaching, and supervising, offers students a balanced education of academic study, field placement, clinical experiences, and research opportunities. Thus, faculty and students share an understanding of the relationship between California's diverse populations and life styles. The common goal of each of the college's professional programs is to assist students in developing competence in professional practice and research methods leading to greater expertise for gathering information, planning, and evaluating professional activities. This commitment to students produces alumni who will continue to work effectively with our professional schools and departments so that the well-being of individuals, groups, and communities are both preserved and promoted.

Bachelor of Arts, Bachelor of Science, Master of Arts, Master of Science, Master of Public Health, Master of Social Work, Ph.D. in Interdisciplinary Research on Substance Use, Ph.D. in Language and Communicative Disorders, Ph.D. in Public Health, Doctor of Physical Therapy (DPT), and the professional doctorate in Audiology (Au.D.), comprise the degrees conferred. In addition, students may receive state credential or state licensure, and national or state professional certification depending upon the program and the legal requirements and obligations for practicing the profession. All programs also provide continuing education for professionals already in the field.

## Curricula Offered

Refer to the Courses and Curricula section of this catalog for a complete listing of program requirements and courses offered by departments within the College of Health and Human Services.

## Doctoral Programs

Audiology (Au.D.), Interdisciplinary Research on Substance Use (Ph.D.), Language and Communicative Disorders (Ph.D.), Physical Therapy (DPT), Public Health (Ph.D.: Epidemiology, Global Health, Health Behavior).

## Master's Degrees

Epidemiology (M.S.), Exercise Physiology (M.S.), Gerontology (M.S.), Kinesiology (M.S.), Nursing (M.S.), Nutritional Sciences (M.S.), Nutritional Science and Exercise Physiology (M.S./M.S.), Public Health (M.S., M.P.H., M.P.H./M.S.W., M.P.H./M.A.; jointly with the College of Arts and Letters), Social Work (M.S.W., M.S.W./ M.P.H., M.S.W./J.D.; jointly with California Western School of Law); Speech, Language, and Hearing Sciences (M.A.).

## Bachelor's Degrees

Athletic Training (B.S.), Foods and Nutrition (B.S.), Gerontology (B.A.), Kinesiology (B.S.), Nursing (B.S.), Public Health, (B.S.), Social Work (B.A.), Speech, Language, and Hearing Sciences (B.A.).

## Minors

Gerontology; Public Health; Social Work.

## Certificate Programs

Applied Gerontology, Bilingual Speech-Language Pathology, Preventive Medicine Residency, Public Health, Social Work Administration.

## Credential Programs

Child Welfare and Attendance Services, Pupil Personnel Services (School Social Work), School Nurse Services, Speech Language Pathology.

## Research Centers and Institutes

## Academy for Professional Excellence

Jennifer Tucker-Tutlow, Director
The Academy for Professional Excellence, administered through the School of Social Work, was established in 1996 with the mission to provide quality training and organizational support to health and human services agencies in the Southern California region including the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego, Santa Barbara, and Ventura. The goal of the academy is to have university faculty and staff available to public and private health and human services agencies in the region by providing coaching, community building (classroom, field-based, online), curriculum development, organization development services, leadership development, training, and training evaluation. The academy develops com-petency-based curriculum on select topics for health and human services agencies in the region, provides quality training to service providers and administrators employed in health and human services agencies, engages in research and evaluation to improve the quality, accountability, and responsiveness of health and human service agencies, and develops executives in the Southern California region who will have the experience, knowledge, and skills to effectively guide organizational change and development. The academy has extensive experience managing contracts with multiple partners and organizations/agencies. The academy manages an annual operating budget of over six million dollars, comprised of multiple grants and contracts from local, federal, state governments, and private foundations.

The academy is located at 6505 Alvarado Road, Suite 107, and can be reached at 619-594-3546 or at http://pcwta.sdsu.edu.

## Center for Alcohol and Drug Studies and Services

Jong Won Min, Director
The Center for Alcohol and Drug Studies and Services is a project of SDSU's School of Social Work. Originally named the Center on Substance Abuse, the center was established in 1985 to address alcohol and other drug-related problems at San Diego State University and in the larger community. The center specializes in research and evaluation design with an emphasis on socio-behavioral research and applied evaluation and is an umbrella organization for several alcohol and drug-related research initiatives, including the SDSU Driving Under the Influence Program, which provides education and counseling services for court-ordered offenders in the central judicial district of San Diego County. Over the past decade, the center has received
numerous federal, state, and county grants and contracts from sponsors that include NIH, NIDA, NIAAA, Robert Wood Johnson Foundation, SAMHSA, and the Department of Defense. Our multi-disciplinary researchers have decades of experience in research and evaluation and are highly committed to scientific excellence. The center is located at 6386 Alvarado Court, Suite 224, 619-229-2340. We invite you to learn more about us through our website at http://www.centerforaod.sdsu.edu.

## Center for Behavioral Epidemiology and Community Health (CBEACH)

Melbourne F. Hovell, Director
Administered through the School of Public Health, CBEACH was established for the purpose of promoting research to study behaviors that prevent or contribute to the causes of disease and injury. Both non-intervention and empirical studies are conducted to determine the factors most responsible for lifestyle practices related to morbidity and mortality. The center focuses on health related behaviors - either protective practices or risk practices - and has been concerned with a wide range of public health and medical concerns such as: tobacco prevention in youth; environmental tobacco exposure reduction in children; STDs, AIDS, pregnancy prevention in adolescents, and prevention in women and divorced adults; violence and anger prevention. CBEACH conducts scientific investigations into the following broad areas: behavioral epidemiology, measurement, and interventions (clinical and community-based).

For more information, visit http://www.cbeachsdsu.com.

## Center for Research on Sexuality and Sexual Health (SASH)

Jerel P. Calzo and Heather L. Corliss, Co-Directors
Administered through the School of Public Health, the Center for Research on Sexuality and Sexual Health (SASH) contributes to the mission of SDSU by helping to advance and extend knowledge, learning, and culture related to sexuality and sexual health; provides opportunities for individuals to develop intellectually, personally, professionally; and prepares significant numbers of educated, responsible people to contribute to California's communities, culture, economy, future, and schools. SASH provides a quality, well-balanced education for undergraduate and graduate students, contributes knowledge and solutions to problems related to sexuality and sexual health through excellence and distinction in research, service, and teaching.

For more information, visit http://publichealth.sdsu.edu/sash/.

## Consensus Organizing Center (COC)

Jennifer M. Cosio, Director
The Consensus Organizing Center is administered through the School of Social Work. The COC's mission is to educate and train a new generation of social workers in community building techniques in order to make them effective catalysts for civic engagement and social change. Through school-based programs and community interventions, the center has created an environment for the teaching of consensus organizing skills to community leaders, foster youth, high school students, and social workers. Specific activities include developing a fellowship program for high school students and providing employment opportunities for undergraduate and graduate students, as well as training to the public in San Diego and throughout the nation. The COC has maintained a pledge to support community- based learning by training a select handful of highly qualified SDSU social work interns in the consensus organizing model and placing them in the San Diego community. Under the direction of Director Jennifer M. Cosio, the COC remains a strong influence in the San Diego community and has developed several successful initiatives using the consensus organizing model.

The center can be contacted at 619-594-4813 or at http://www. consensus.sdsu.edu.

## Heart Institute

Christopher C. Glembotski, Director
The Heart Institute is sponsored by the College of Health and Human Services and the College of Sciences. The goals of the institute are to enhance basic and clinical research in the cardiovascular sciences, to foster undergraduate and graduate education in cardiovascular physiology and medicine, and to provide a community outreach service focused at heightening the awareness of cardiovascular disease and its prevention in the San Diego region surrounding SDSU. The institute is comprised of faculty members representing four different colleges at SDSU, as well as physicians and scientists from local hospitals and clinical research centers. Importantly, the institute also sponsors SDSU undergraduate and graduate student memberships, which strengthens the involvement of students in all aspects of Heart Institute activities. The unusual blend of talent and expertise that comprise the institute membership results in an interdisciplinary approach to cardiovascular research, education and community outreach that is unique to the Heart Institute. The institute sponsors special seminars, on- and off-campus, which cover a wide range of topics in the field, and provides funding for the support of graduate students who are involved in cardiovascular research at SDSU. Areas of focus for the institute include studies of the molecular basis of cardiovascular disease, establishment of unique approaches for the early detection and prevention of cardiovascular disease, and the promotion of cardiovascular health in San Diego area K-12 schools. An important feature of these efforts that distinguishes the Heart Institute is the central role that SDSU students play in each of these areas. Funding for Heart Institute activities comes from a variety of sources, including the National Institutes of Health, the American Heart Association, the Muscular Dystrophy Association, the Rees-Stealy Research Foundation, and several San Diego-based biotechnology companies. For more information, contact the Heart Institute office at 619-594-5504 or at http:// www.bio.sdsu.edu/heart/sdsuhihome.htm.
Institute for Behavioral and Community Health (IBACH) Guadalupe X. Ayala, Director

Administered through the School of Public Health, IBACH, formerly known as the Center for Behavioral Medicine, was established in 1982 for the purpose of promoting research and academic programs relevant to the application of behavioral science principles to medicine and health care. IBACH's current mission is to identify determinants of Latino and other health disparities and intervention approaches that address these determinants. IBACH has 27 investigators from the College of Health and Human Services (School of Public Health, Exercise and Nutritional Sciences), College of Sciences (Psychology), and the Fowler College of Business (Marketing). It has two centers, the South Bay Latino Research Center and the Center for Research on Sexuality and Sexual Health. Strong research and teaching partnerships have been established with the UCSD School of Medicine, the Department of Pediatrics - Division of Child Development and Community Heath, the Department of Family and Preventive Medicine, and Moores Cancer Center. Additional collaborations include Clinicas de Salud del Pueblo, Inc., Healthy Eating and Active Communities, San Ysidro Health Center Scripps Institute, Scripps Whittier Diabetes Institute, Inc., and WalkSan Diego. Funding comes from the National Institutes of Health (NCI, NICHD, NIDDK, NHLBI, NINR), Centers for Disease Control and Prevention, Patient Centered Outcomes Research Initiative, Robert Wood Johnson Foundation, American Cancer Society, Dentaquest Foundation, Howell Foundation, and Kaiser Family Foundation. The institute provides important research experiences to trainees at all levels who intend to pursue related careers and offers opportunities for project staff and graduate students to participate in community-based work. IBACH offices are located at 9245 Sky Park Court, Suite 221, San Diego, CA 92113; additional sites are in Imperial County (Calexico and El Centro) and Chula Vista. For more information about IBACH, please visit our website at http://ibachsd.org.

## Institute for Public Health (IPH)

Corinne McDaniels-Davidson, Director
Administered through the School of Public Health, the mission of the IPH is to serve as a vehicle for the development and support of functional linkages between the SDSU School of Public Health, local public health agencies, and private organizations in the San Diego community and neighboring areas, including Mexico. These linkages expand the availability of university-based public health expertise, research and information in the areas of epidemiology, biostatistics, health promotion and behavioral science, occupational and environmental health, maternal and child health, health services management and policy, and global/ border health. Specific activities include collaborative research, technical assistance, program evaluation, consultation, continuing education and professional development, student field placement, faculty/practitioner exchange, information dissemination, and various service activities. The institute serves to bridge public health academics and practice by facilitating meaningful partnerships between faculty, students, and local practitioners. Visit the institute online at http://iph.sdsu.edu/.

## Social Policy Institute

Steve D. Hornberger, Director
Administered through the School of Social Work, the mission of the institute is to assist local, regional and state public and private sector leaders in the development of policies and programs that focus on family and community well-being. The institute is particularly focused on efforts that impact social determinants of health and reduce adverse outcomes for vulnerable communities, families, and individuals. To that end, we assist in identifying community strengths, needs, outcomes of care, program design, quality, as well as catalyzing and convening community leaders. The institute is particularly interested in innovative efforts that are collaborative, data driven, inclusive, and sustainable. The institute has prepared a training manual and CD-ROM for home visitors and case managers working with vulnerable families and has conducted community needs assessments surveys in Baja California Sur for the purpose of policy and program development. A computerized information system to provide decision and evaluation support to human services agencies has been developed and is available through the San Diego State University Research Foundation Technology Transfer Office.

For more information, visit http://socialwork.sdsu.edu/research/ research-centers-institutes/social-policy-institute.

## University Center on Aging

## Anita S. Harbert, Director

The University Center on Aging is administered by the School of Social Work. The center is involved with supporting interdisciplinary educational and curriculum efforts; undertaking research, demonstration and evaluation activities; providing technical assistance and agency consultation for the community; coordinating workshops and seminars; and providing opportunities for student involvement in aging activities. The center serves as a central point for the development, dissemination, and analysis of data related to diversity and aging and long-term care.

Learn more about the center at http://socialwork.sdsu.edu/coa.
The center can be contacted at 619-594-4813 or at http://www. consensus.sdsu.edu.

# College of Professional Studies and Fine Arts 

## Administration

Dean: Peggy Shannon
Associate Dean: Donna M. Conaty
Associate Dean: Kurt J. Lindemann (Acting)
Assistant Dean for Student Affairs: Alane S. Lockwood
Director of Communications: Lizbeth Persons Price (Interim) Director of Development: Elise Moersch
Director of International Programs: Giancarlo Taylor

## General Information

The College of Professional Studies and Fine Arts is committed to the pursuit of excellence in academic and artistic endeavors geared to enhancing the human enterprise. Composed of 10 departments and schools, the college is recognized for its excellent academic programs that create a bridge between university and community life by preparing students for professional careers in a wide spectrum of artistic, cultural, educational, social, economic, and technical fields.

The college houses the schools of Art and Design; Communication; L. Robert Payne Hospitality and Tourism Management; Journalism and Media Studies; Music and Dance; Public Affairs; Theatre, Television, and Film. The college also houses three ROTC departments with programs that lead to commissioned officer status upon graduation.

Preparing students to engage in the world-wide community through creativity, involvement, leadership, and innovation is the hallmark of the PSFA experience. Faculty of the college pride themselves on creating a classroom that is a stepping stone to the global community. PSFA is the only college to offer an International Studies minor; students are encouraged to include study and research abroad as part of their PSFA experience. Faculty maintain professional relationships and conduct research in their respective industries, allowing students to participate in meaningful, real-world service learning opportunities in the local and global community. With the support of the largest alumni group at the university, PSFA bridges the college experience by providing students access to professional opportunity through internships and contact with industry professionals in the classroom and the community. Our alumni serve as key advisers and provide a critical link to the professional community. The PSFA experience links college, community, and career.

## Curricula Offered

Refer to the Courses and Curricula section of this catalog for a complete listing of program requirements and courses offered by schools and departments within the College of Professional Studies and Fine Arts.

## Master's Degrees

Art (M.A., M.F.A.), City Planning (M.C.P.), Communication (M.A.), Criminal Justice and Criminology (M.S.; jointly with the College of Arts and Letters), Film and Television Production (M.F.A.), Hospitality and Tourism Management (M.S.), Learning Design and Technology (M.A.), Meeting and Event Management (M.S.), Music (M.A., M.M.), Public Administration (M.P.A., M.P.A./M.A.; jointly with the College of Arts and Letters), Theatre Arts (M.A., M.F.A.).

## Bachelor's Degrees

Art (B.A.), Communication (B.A.), Criminal Justice (B.S.), Dance (B.A., B.F.A.), Health Communication (B.S.), Hospitality and Tourism Management (B.S.), International Security and Conflict Resolution (B.A.; jointly with the College of Arts and Letters and the College of Sciences), Journalism (B.A.), Learning Design and Technology (M.A.), Music (B.A., B.M.), Public Administration (B.A.), Recreation Administration (B.S.), Television, Film and New Media (B.S.), Theatre Arts (B.A.).

## Minors

Air Force Leadership Studies, Art, Art History, Communication, Dance, Digital and Social Media Studies, International Security and Conflict Resolution (jointly with the College of Arts and Letters and the College of Sciences), International Studies, Learning Design and Technology, Military Science, Music, Naval Science, Public Administration, Recreation, Somatic Studies, Television, Film and New Media, Theatre Arts.

## Military Curricula

Air Force Leadership Studies, Military Science, Naval Science.

## Certificate Programs

Artist Diploma, Communication, Entertainment Management, Health Communication, International Media, Meeting and Event Management, Performance, Public Administration (available at SDSU Imperial Valley only).

## Arts Alive SDSU

Arts Alive SDSU is a university initiative dedicated to providing opportunities for students, faculty, and staff at San Diego State University to engage in the arts as an integral part of a comprehensive education that promotes creative research, interdisciplinary collaboration, professional innovation, and personal enrichment on campus and in the community. Our goals are to raise awareness of the vibrant arts programming at SDSU, while increasing attendance at SDSU arts events both on and off campus; to integrate arts activities into a wider range of academic life at SDSU, encouraging the participation of students in all disciplines; to facilitate collaborations among students and faculty in the arts, humanities, and sciences in courses that apply artistic practices as a mode of critical inquiry; and to develop a national profile of SDSU as a progressive educational institution, providing arts-based models of interdisciplinary research, community engagement, and program assessment. Visit https://artsalive. sdsu.edu/ for more information.

## Research Centers and Institutes

Center for Communication, Health, and the Public Good Wayne A. Beach, Director

The Center for Communication, Health, and the Public Good is an innovative hub for investigating critical relationships between communication and health that shape the human social condition in contemporary society. Center affiliates conduct basic research generating new discoveries, insights, and knowledge about the fundamental importance of human communication when managing disease, disorders, illness, and wellness. Researchers investigate how communication functions across a wide array of health challenges (e.g., cancer, diabetes, obesity), cultures, settings, and social relationships. The goal is to translate research findings into significant educational resources, such as campaigns, interventions, pedagogy, and other tools for improving communication that enhance quality of life and healthcare.

## Center for Hospitality and Tourism Research

## Carl Winston, Director

The Center for Hospitality and Tourism Research is an education and research center dedicated to the study and application of professional principles in the broad field of hospitality and tourism. The mission of the center is to enhance the skills and knowledge of professionals and students in the field of hospitality and tourism management through the creation and delivery of initiatives in executive development, research, and curriculum innovation.

Programs associated with the center focus on identifying "best practices" in all aspects of hospitality and tourism such as hotel
operations, restaurant operations, global tourism, and events, conventions and attractions management. The center's mission is pursued in multiple venues, including private, public, and not-forprofit agencies. Our vision is to become the leading center for hospitality and tourism management education in Southern California and a prominent national and international resource for questions related to education in hospitality and tourism. The center actively seeks to support SDSU, the College of Professional Studies and Fine Arts, and members of the local and national community in matters related to hospitality and tourism.

Contact the center at 619-594-4964, or visit the website at https://htm.sdsu.edu/about_us/centers_and_insti-tutes/center-for-hospitality-and-tourism-research.

## Center for Learning, Instruction, and Performance Technologies

Marcie J. Bober-Michel, Director
The center's faculty and staff conduct research on the design and use of technology-based systems for enhancing human learning and performance, monitor trends in advanced applications of educational technology and allied disciplines, and evaluate the effectiveness and usability of educational products and services.

The center consults with corporations, agencies, and SDSU affiliates on the design of products for education and training, arranges for on-site and electronic delivery of professional development courses and seminars by the nationally recognized faculty of SDSU Learning Design and Technology, and coordinates fieldwork and internship opportunities for advanced graduate students.

## Center for Science and Media

A collaboration of the School of Journalism and Media Studies, the College of Professional Studies and Fine Arts, and the College of Sciences, the Center for Science and Media strives to educate the public about science, through the strategic and ethical use of media. The Center offers public lectures, crisis communication training, opportunities for research collaborations, and a writing course for science majors to learn how to communicate science information and scientific findings to lay audiences via the news media.

## Center for the Study of Media and Performance (CSMP)

Kurt J. Lindemann, Director
The Center for the Study of Media and Performance (CSMP) is an interdisciplinary forum for critical inquiry into the many expressions of live art and screen culture. The objectives of the center are to make a significant intervention into research practices in the arts, to engage leading thinkers in these and related fields in a national dialogue, and to bridge the divide separating theory and practice. The center welcomes the participation of SDSU faculty, students, and affiliates, as well as the greater San Diego community. For more information, visit https://communication.sdsu.edu/ research/media-and-performance.

## Center for the Study of Women in Television and Film

Martha M. Lauzen, Director
The Center for the Study of Women in Television and Film is the nation's first program dedicated solely to the study and discussion of women's representation on screen and behind the scenes in television and film. The purpose of the center is to (1) engage students, faculty, and individuals working in the industry in an on-going discussion regarding the portrayals of girls and women in television and film and women's employment behind the scenes; (2) heighten the profile of women's representation in television and film as a public policy issue and concern; (3) train the next generation of scholars to analyze media images of women, and; (4) conduct an expanded agenda of original research on women's representation in television and film that has both practical and theoretical import.

To learn more, visit http://womenintvfilm.sdsu.edu.

## Center for Surf Research

Jess Ponting, Director
The Center for Surf Research is the first of its kind in the world. The center responds to the challenges of a rapidly expanding surfing industry and the broadening horizons of surf tourism and its impact on peoples, environments, and economies along the coastlines of more than 100 countries. Housed in the L. Robert Payne School of Hospitality and Tourism Management, the center engages with the surf industry and surf tourism industry to create a cutting edge research agenda; disseminates specialist knowledge to governments, the surf industry, tourism developers, destination communities, non-profits, and tourists; shapes responsible global citizens through life-changing experiential learning opportunities and study abroad programs; and, inspires active stakeholder engagement with the social and economic development of destination communities, the sustainable use of their resources, and the conservation of their critical environments. For more information, visit the website at https://htm.sdsu. edu/about_us/centers_and_institutes/center-for-surf-research.

## Conrad N. Hilton Foundation Volunteer and Mentorship Center

The Conrad N. Hilton Foundation Volunteer and Mentorship Center is an endowed center that connects hospitality and tourism management (HTM) students to numerous volunteer and mentoring opportunities throughout San Diego.

Housed in the L. Robert Payne School of Hospitality and Tourism Management, the center engages with area high schools to provide learning opportunities for under-served youth. These range from supervised one-on-one mentoring by HTM students to the high school students, to an annual one-day educational conference managed and produced by the center. These programs shape responsible citizens through life-changing experiential teaching and learning opportunities and inspire active engagement with the social and economic development of San Diego. Visit the website at http://htm.sdsu.edu/web/index.php/ students/volunteer_mentorship_center for more details.

## Glen M. Broom Center for Professional Development in Public Relations

Housed in the School of Journalism and Media Studies, the Glen M. Broom Center for Professional Development in Public Relations facilitates professional development of students via internship support, of faculty via research support, and of public relations practitioners via support for their life-long learning. Launched in 2013 in honor of long-time public relations professor Dr. Glen M. Broom, the Center hosts international visiting scholars in public relations, offers training sessions for practitioners preparing for the Accredited in Public Relations examination, and houses the prestigious Journal of Public Relations Research.

## Institute for Dialogue and Social Justice

## Luke A. Winslow, Director

The Institute for Dialogue and Social Justice deploys the interdisciplinary scholarship and activism of SDSU faculty, students, and community members to enhance productive dialogue about pressing social issues of SDSU and the wider San Diego region. The institute seeks to develop a culture of redressing direct and indirect forms of social and economic injustice and promoting alternative policies, practices, and vocabularies that enhance the potential for all people to live healthy, safe, full, viable, and meaningful lives. Because productive dialogue is crucial for a campus and community marked by pronounced tensions across scholarly (academic/social), political (conservative/liberal), geographic (urban/rural), regional (border issues/US and Mexico), cultural (civilian/military), and material identities (historically privileged/ historically oppressed) our institute seeks to promote the positive change needed to address these tensions on the SDSU campus and in surrounding communities and leverage our skills, knowledge, and perspectives to develop a culture defined by the public good. The institute is located in the School of Communication. For more information, visit Communication, Room 244.

## Institute for Leisure and Tourism Management

Lawrence A. Beck, Director
The Institute for Leisure and Tourism Management is primarily concerned with conducting leisure-related research, promoting professional development, disseminating specialized publications, and organizing conferences, seminars, lectures, and workshops.

## Institute for Meetings and Events

The Institute for Meetings and Events is focused on education and research dedicated to the application of professional principals in meetings and events. The institute was created to enhance education and knowledge of students and professionals in this discipline. The institute has a global orientation and is guided by an international advisory board composed of the profession's most seasoned and successful leaders. The institute offers symposia, forums, and other education programs to stimulate dialog and discussion on key issues and to create new knowledge in this dynamic and emerging discipline. The institute conducts timely and innovative research as well as benchmarking data for best-practices. The institute involves faculty with expertise in disciplines as diverse as project management, business, public relations, graphic design, theatre, and hospitality. Visit https://htm. sdsu.edu/about_us/centers_and_institutes/institute-for-meet-ings-and-events for more details.

## Institute for Innovative Governance

## Patricia A. Frosio, Director

The Institute for Innovative Governance, located in the School of Public Affairs, was established to produce applied research solutions for public policy and governance challenges, with a focus on innovative practices. Institute activities include producing research and policy papers supporting data gaps and research needs of local governments and nonprofit agencies and sponsoring conferences and events with government and community leaders. School of Public Affairs students are integrated into the institute's work and equipped with the skills to approach public policy and governance challenges critically to provide efficient and responsive public services.

## The Investigative Newsource

Lorie Hearn, Executive Director
Investigative Newsource is housed in the School of Journalism and Media Studies. The institute is an independent, non-profit organization whose mission is twofold: (1) to produce investigative, data-driven journalism that informs the citizens of San Diego and Imperial counties and (2) to help develop the investigative journalists of the future. Through internships and other mentoring opportunities, the institute offers ways to enhance the learning experience of journalism students at San Diego State University. The institute is collaborative, not competitive, and seeks to distribute its work across multiple media platforms - print, broadcast and online - throughout the region. The institute is nonpartisan and does not engage in political advocacy. The website is http:// www.inewsource.org.

## Sycuan Institute on Government Gaming

Katherine A. Spilde, Director
The Sycuan Institute on Government Gaming, in partnership with the Center for Global Gaming Research, is housed in the L. Robert Payne School of Hospitality and Tourism Management. Under the terms of an endowment by the Sycuan Band of the Kumeyaay Nation, the institute has created and introduced an academic curriculum leading to the B.S. in Hospitality and Tourism Management with an emphasis in Tribal Gaming Operations and Management. The institute also produces and funds original academic research related to the legal gambling industry with an emphasis on tribal government gaming. In particular, the institute is dedicated to the development of a professional class of gaming industry experts who understand the unique partnership between host governments and the legal gambling industry. The institute actively engages students, faculty, and industry partners in order to cultivate a professional workforce, develop and document best practices, and share successful gaming innovations. Visit http:// htm.sdsu.edu/web/index.php/centers/sycuan for details.

## The J. Willard and Alice S. Marriott Foundation Student Center for Professional Development

## Christina Jeffries, Director

The J. Willard and Alice S. Marriott Foundation Student Center for Professional Development is housed in the School of Hospitality and Tourism Management (HTM). The center provides support for internship programs related to the hospitality industry. It assists HTM students in finding internships and job placement through workshops, focus groups, and continuing conversations with industry leaders. Every HTM student spends two semesters working with the center, and again uses center resources at graduation. This experiential learning builds professional competencies which enhance effectiveness when students enter the workforce. The center serves as a testing ground to determine an individual's competence before hiring as a permanent employee. Visit https://htm.sdsu.edu/about_us/centers_and_institutes/j-wil-lard-and-alice-s-marriott-foundation-student-center-for-profes-sional-development for more details.

## Production Center for Documentary and Drama

Timothy Powell, Director
The Production Center for Documentary and Drama is located in the School of Theatre, Television, and Film and is the professional production arm of the university. The center mentors graduate students in media in the creation of projects that promote their artistic and technical growth, and works with global film schools, film institutes, and filmmakers in the production of its long-running, international TV series, "The Short List," showcasing short films. The center interfaces with local, state, and national entities in the creation of films and television programs in the arts, humanities, and sciences, including distribution on public and cable television. These projects provide senior and graduate students with professional opportunities to work in key capacities, such as writing, directing, camera crew, editing, and production design.

For more information, visit the website at https://ttf.sdsu.edu/ index.php/degree_programs/tfm/tfm-overview.

# College of Sciences 

## Administration

Dean: Jeffrey Roberts
Associate Dean for Academic and Faculty Affairs: Catherine J. Atkins
Associate Dean for Graduate and Research Affairs:
Tod W. Reeder
Assistant Dean for Student Affairs: Estralita M. E. Martin
Executive Director of Development: Stacy Carota
Director of College of Sciences Advising: Emilio C. Ulloa Director of Resource Management: Tony P. Carrasco

## General Information

The College of Sciences, composed of eight departments and various subprograms, offers bachelor's, master's, and doctoral degrees, and curricula for preprofessional students in medicine, veterinary medicine, and dentistry. The science curriculum is enhanced by research centers which provide field experience as well as special seminars with guest speakers. The off-campus sites include the Mt. Laguna Observatory, and about 5,000 acres in four biological sciences research stations. The majority of tenured sciences faculty have active research programs which offer student involvement.

## Curricula Offered

Refer to the Courses and Curricula section of this catalog for a complete listing of program requirements and courses offered by departments within the College of Sciences.

## Doctoral Programs

Biology (Cell and Molecular) (Ph.D.), Chemistry (Ph.D.), Clinical Psychology (Ph.D.), Computational Science (Ph.D.), Ecology (Ph.D.), Evolutionary Biology (Ph.D.), Geophysics (Ph.D.), Mathematics and Science Education (Ph.D.).

## Master's Degrees

Applied Mathematics (M.S.), Astronomy (M.S.), Bioinformatics and Medical Informatics (M.S.), Biology (M.A., M.S.), Chemistry (M.A., M.S.), Computational Science (M.S.), Computer Science (M.S.), Geological Sciences (M.S.), Homeland Security (M.S.), Mathematics (M.A.), Medical Physics (M.S.), Microbiology (M.S.), Physics (M.A., M.S.), Psychology (M.A., M.S.), Regulatory Affairs (M.S.), Statistics (M.S.).

## Bachelor's Degrees

Astronomy (B.S.), Biology (B.A., B.S.), Chemical Physics (B.S.), Chemistry (B.A., B.S.), Computer Science (B.S.), Environmental Sciences (B.S.), Geological Sciences (B.A., B.S.), International Security and Conflict Resolution (B.A.; jointly with the College of Arts and Letters and the College of Professional Studies and Fine Arts), Mathematics (B.A., B.S.), Microbiology (B.A., B.S.), Physical Science (B.A.), Physics (B.A., B.S.), Psychology (B.A.), Statistics (B.S.).

## Minors

Astronomy, Biology, Chemistry, Computer Science, Energy Studies, Geological Sciences, International Security and Conflict Resolution (jointly with the College of Arts and Letters and the College of Professional Studies and Fine Arts), Mathematics, Oceanography, Physics, Psychology, Statistics.

## Certificate Programs

Biotechnology, Communication Systems, Geographic Information Science, Industrial/Organizational Psychology, Intellectual Property and Regulatory Affairs, Professional Computational Science, Regulatory Affairs, Residency Training in Radiation Therapy Physics, Single Subject Mathematics, Web and Mobile Applications Development.

## Health Professions Curricula

Predental, Premedical, Preoptometry, Prepharmacy, Prephysician Assistant, Preveterinary.

## Research Centers and Institutes

## Center for Behavioral Teratology (CBT)

Edward P. Riley, Director
Sarah N. Mattson, Associate Director
Teratology is the study of birth defects. The faculty and students at the Center for Behavioral Teratology (CBT) are interested in how prenatal exposure to various drugs influences both brain and behavioral development. Additionally, members of the center engage in research related to the general neurotoxicity of alcohol as well as the study of other birth defects and disorders. The CBT is truly an interdisciplinary research organization, with a broad range of basic and clinical research interests. While the primary purpose of the CBT is to promote research in teratology, personnel in the center also act as a resource to the university and the community. The staff provides in-service talks at local hospitals, schools, and drug treatment facilities, as well as lectures to various classes at the university. The CBT staff has active collaborations with faculty from UCSD, the VA Hospital, Children's Hospital, and the Scripps Research Institute. Faculty in the center have grants from the National Institutes of Health, Tobacco-Related Disease Research Program, and the State of California.

## Center for Energy Studies (CES)

The San Diego State University Center for Energy Studies (CES) facilitates, promotes and supports research and academic programs relating to energy, with particular emphasis on energy matters of concern to the greater San Diego region including the international border with Mexico. The center encourages interdisciplinary research and instructional programs in the broad areas of energy modeling, technology assessment of energy systems, local energy policy planning and data collection relating to energy usage in the San Diego region. SDSU offers through the CES an interdisciplinary minor in energy studies. Completion of the minor will give the student a broad understanding of the technical, economic, social, and political aspects of energy issues. The CES is closely integrated with the environmental sciences program, which offers a Bachelor of Science degree through the College of Sciences and the recently established SDSU Center for Regional Sustainability. The CES works closely with local and state agencies concerned with energy policy and planning, and serves as a community resource in matters concerning local energy issues, and the impact of energy use of the environment.

For more information, call the CES at 619-594-1354.

## Center for Microbial Sciences

Anca M. Segall, Director
Stanley R. Maloy, Associate Director
The Center for Microbial Sciences is a research center dedicated to the study of microorganisms. The center's mission is to provide a productive, stimulating, and interactive research environment that will lead to rapid progress in the fields of microbial biology. The center integrates multiple scientific approaches to elucidate basic biological principles that helps in combating human health problems caused by microorganisms and stimulates applications of microorganisms in the biotechnology industry.

The center encourages multidisciplinary scientific research by bringing together a group of creative, cooperative investigators with different scientific backgrounds to attack major questions in microbial biology using a variety of experimental approaches. The center also trains scientists to attack important but neglected problems in microbial biology. The close proximity of the Center for Microbial Sciences to a nucleus of biotechnology companies facilitates interactions with industry. The center also collaborates with neighboring institutions with expertise in other biological areas (UCSD, Scripps Research Institute, Salk Institute, Scripps Institution of Oceanography, and others) providing additional intellectual and physical resources.

The primary goals of the center are: Research - To attract a group of imaginative, interactive investigators and provide a stimulating environment for productive, innovative research in microbial biology; Training - To train a new generation of scientists to solve important problems in microbial biology using innovative experimental approaches; Outreach - to provide expertise and facilities for visiting scientists from academia and industry to learn new technologies.

Find out more about the center by visiting the website at http:// www.sci.sdsu.edu/~smaloy/CMS/.

## Center for Regulatory Science

## Catherine J. Atkins, Interim Director

Lisa C. Dowdy, Associate Director
The Center for Regulatory Science focuses on education and training related to the research, development, manufacture, commercialization, and post-marketing surveillance of pharmaceutical, biological, and medical device products regulated by the FDA and its international counterparts. The center's programs address the over-arching legal, ethical, and regulatory requirements for biomedical products. Programs provide students with the broadbased skills required by biotechnology companies as their initial product development projects progress from research and development into clinical research, process development, manufacturing, and beyond.

The Master of Science degree in regulatory affairs was the first program developed and offered by the center. Other offerings include an advanced certificate in regulatory affairs and an advanced certificate in intellectual property and regulatory affairs, offered in partnership with the University of San Diego School of Law.

Online e-learning technologies are used to make the center's education and training programs widely available to individuals outside of the San Diego region. Flexible learning options are designed to accommodate the busy work and travel schedules of industry professionals. The center is attuned to national and regional economic and workforce development issues, and interfaces with the California State University Program for Education and Research in Biotechnology (CSUPERB). Additional information is available from the Center for Regulatory Science office, 619-594-6030, http://regsci.sdsu.edu.

## Center for Research in Mathematics and Science Education (CRMSE)

Randolph A. Philipp, Director
William C. Zahner, Associate Director
The Center for Research in Mathematics and Science Education (CRMSE) is an interdisciplinary consortium of faculty interested in research on substantive questions related to the learning and teaching of science and mathematics. The center was established in the College of Sciences in 1986 and became an interdisciplinary center with the College of Education in 1987. The center currently has members from the faculties of biology, dual language and English learner education, mathematics and statistics, physics, psychology, and teacher education. CRMSE is administered by a director and an associate director, who are appointed by the deans of the Colleges of Sciences and Education, in consultation with CRMSE members. Through its activities, CRMSE initiates, encourages, and supports the scholarly pursuit of important theoretical and applied problems in mathematics and science education. CRMSE supports faculty in their current research projects and in the preparation of manuscripts for publication and grant proposals for continued research. The center houses the Doctoral Program in Mathematics and Science Education (MSED) that is offered jointly by SDSU and the University of California, San Diego. It also houses the Professional Development Collaborative to serve area teachers.

The main office of the center is located at 6475 Alvarado Road, Suite 206, San Diego, CA 92120-5013. For more information, contact 619-594-1579. The center may also be reached via campus Mail Code 1862 and at http://crmse.sdsu.edu.

## Clinical and Cognitive Neuroscience Center

Karen D. Emmorey, Phillip J. Holcomb, Tracy E. Love-Geffen, Sarah Mattson, Ralph-Axel Müller, Lewis P. Shapiro, Executive Committee

The goal of the Center for Clinical and Cognitive Neuroscience is to create a framework for SDSU faculty and students to study brain-based language and cognitive processing and its disorders, enhance teaching and research mentoring in clinical and cognitive neuroscience, and to expand SDSU's capability to become a leader in an area that is rapidly developing and essential to understanding human behavior. Additional information is available at https://slhs.sdsu.edu/cen/.

## Coastal and Marine Institute (CMI)

Todd W. Anderson, Director
The Coastal and Marine Institute (CMI) promotes marine science research, education, and public service at SDSU. CMI emphasizes research in near-shore coastal ecosystems and is composed of faculty among departments within and outside the College of Sciences. The institute operates the SDSU Coastal and Marine Institute Laboratory (CMIL) located on San Diego Bay, facilitating faculty and student research and fostering interaction and collaboration with other institutions, agencies, and the community. CMIL offers closed-circuit and flow-through seawater, environmentally controlled rooms, a wet lab, analytical lab, equipment room, dive locker, and shop. A large yard for boat storage, equipment storage, and outdoor mesocosms to conduct research is also provided. The institute is administered by a director and an advisory council consisting of faculty members from participating departments, including Biology, Chemistry, Geological Sciences, and the School of Public Health. Additional information about marine studies is available from the Coastal and Marine Institute director, from the College of Sciences, and from the CMI website: http://www.sci.sdsu.edu/CMI.

## Computational Science Research Center (CSRC)

José E. Castillo, Director
Andrew L. Cooksy, Paul J. Paolini, Satchi Venkataraman,
Associate Directors
The Computational Science Research Center (CSRC) promotes the development and advancement of the interdisciplinary subject of computational science. This is accomplished by fostering research, developing educational programs, and promoting industrial interaction, outreach, and partnership activities.

The center provides an environment for scientific research at San Diego State University. It facilitates the interaction between applied mathematics, computer science, and other disciplines by providing the necessary infrastructure for productive research efforts. Real world applications are the focus of faculty and student projects. These projects provide an educational opportunity for students to hone industrially relevant computational skills. The CSRC provides high performance computing and network support to the faculty in the College of Sciences, the College of Engineering, and other colleges on campus in need of computational infrastructure support.

The goals of the center are to encourage and facilitate research in computation, simulation, visualization, and numerical modeling in all disciplines (business and finance, biology and bioinformatics, engineering, physical sciences, and geography); to interact with other centers, laboratories, universities, and local industry; reduce lag time between algorithm development/analysis and applications; to participate in programs with other countries, including international programs sponsored by the National Science Foundation; to arrange visits by professors, including foreign visitors on sabbaticals and professional staff on industrial sabbaticals; to arrange part time and adjunct appointments for consulting activities by professional staff from local research laboratories; to provide employment, experience, and contacts for students; to sponsor conferences, workshops, and courses; to facilitate collaboration with government laboratories with private sector; to provide bridges to regional industry; and to direct the computational science program at San Diego State University.

Interested students and faculty may obtain more information by contacting the CSRC at 619-594-3430 or http://www.csrc.sdsu. edu.

## Edwin C. Allison Center for Earth System History

Stephen A. Schellenberg, Director
Throughout the history of science, many of the critical breakthroughs in scientific understanding have resulted from cross-disciplinary research. The mission of the Allison Center for Earth System History is to foster this approach across the fields of paleontology, paleoclimatology, geochemistry, sedimentology, and organismal biology. The center seeks to facilitate research designed to improve and disseminate our understanding of global climate change and biodiversity, arguably the two most important topics facing current and future generations. Research materials of past and present faculty and their students form the core of an in-house reference and systematics collection, including Cretaceous to Recent Ostracodes from globally distributed ocean drilling sites and Ordovician, Devonian, and Carboniferous brachiopods and associated communities from the Appalachian Basin, the Great Basin, the Ohio Valley, and the mid-continent. Scholarly examination of these and other materials by SDSU students, faculty, and guests (e.g. visiting students, faculty) are supported through dedicated research space and facilities, including image analysis and carbonate microsampling systems.

For more information, about the center, visit the website at http://www.geology.sdsu.edu/facilities/allisonctr.

## Heart Institute

Christopher C. Glembotski, Director
The Heart Institute is sponsored by the College of Health and Human Services and the College of Sciences. The goals of the institute are to enhance basic and clinical research in the cardiovascular sciences, to foster undergraduate and graduate education in cardiovascular physiology and medicine, and to provide a community outreach service focused at heightening the awareness of cardiovascular disease and its prevention in the San Diego region surrounding SDSU. The institute is comprised of faculty members representing four different colleges at SDSU, as well as physicians and scientists from local hospitals and clinical research centers. Importantly, the institute also sponsors SDSU undergraduate and graduate student memberships, which strengthens the involvement of students in all aspects of Heart Institute activities. The unusual blend of talent and expertise that comprise the institute membership results in an interdisciplinary approach to cardiovascular research, education and community outreach that is unique to the Heart Institute. The institute sponsors special seminars, on- and off-campus, which cover a wide range of topics in the field, and provides funding for the support of graduate students who are involved in cardiovascular research at SDSU. Areas of focus for the institute include studies of the molecular basis of cardiovascular disease, establishment of unique approaches for the early detection and prevention of cardiovascular disease, and the promotion of cardiovascular health in San Diego area K-12 schools. An important feature of these efforts that distinguishes the Heart Institute is the central role that SDSU students play in each of these areas. Funding for Heart Institute activities comes from a variety of sources, including the National Institutes of Health, the American Heart Association, the Muscular Dystrophy Association, the Rees-Stealy Research Foundation, and several San Diego-based biotechnology companies.

For more information, contact the Heart Institute office at 619-594-5504 or at http://www.bio.sdsu.edu/heart/sdsuhihome.htm.

## Institute for Behavioral and Community Health (IBACH)

Guadalupe X. Ayala, Director
Administered through the School of Public Health, IBACH, formerly known as the Center for Behavioral Medicine, was established in 1982 for the purpose of promoting research and academic programs relevant to the application of behavioral science principles to medicine and health care. IBACH's current mission is to identify determinants of Latino and other health disparities and intervention approaches that address these determinants. IBACH has 27 investigators from the College of Health and Human Services (School of Public Health, Exercise and Nutritional Sciences), College of Sciences (Psychology), and the Fowler College of Business (Marketing). It has two centers, the South Bay Latino

Research Center and the Center for Research on Sexuality and Sexual Health. Strong research and teaching partnerships have been established with the UCSD School of Medicine, the Department of Pediatrics - Division of Child Development and Community Heath, the Department of Family and Preventive Medicine, and Moores Cancer Center. Additional collaborations include Clinicas de Salud del Pueblo, Inc., Healthy Eating and Active Communities, San Ysidro Health Center Scripps Institute, Scripps Whittier Diabetes Institute, Inc., and WalkSan Diego. Funding comes from the National Institutes of Health ( $\mathrm{NCI}, ~ \mathrm{NICHD}, ~$ NIDDK, NHLBI, NINR), Centers for Disease Control and Prevention, Patient Centered Outcomes Research Initiative, Robert Wood Johnson Foundation, American Cancer Society, Dentaquest Foundation, Howell Foundation, and Kaiser Family Foundation. The institute provides important research experiences to trainees at all levels who intend to pursue related careers and offers opportunities for project staff and graduate students to participate in communi-ty-based work. IBACH offices are located at 9245 Sky Park Court, Suite 221, San Diego, CA 92113; additional sites are in Imperial County (Calexico and El Centro) and Chula Vista. For more information about IBACH, please visit our website at http://ibachsd. org.

## Institute for Ecological Monitoring and Management (IEMM)

The Institute for Ecological Monitoring and Management (IEMM) provides a productive, interdisciplinary, and collaborative environment for research directed at developing new approaches, techniques and models for ecological monitoring and management. It engages in applied research that conducts science in service of policy and management, and works to translate science for policy makers and the larger community.

IEMM serves as a nexus to promote inter-department and inter-college research initiatives and facilitates the incorporation of academic and scientific expertise and involvement into relevant restoration, conservation and monitoring projects in the greater San Diego area. Its mission is to create an internationally and nationally recognized research entity. IEMM has three primary goals: research, training, and community service.

## Integrated Regenerative Research Institute (IRRI)

Mark A. Sussman, Director
The Integrated Regenerative Research Institute (IRRI) promotes faculty participation and collaboration in research and teaching programs relating to regenerative research on both basic and translational levels in health and disease. The institute (1) fosters and encourages communication of ideas and information among its membership for mutual professional improvement; (2) attracts students to SDSU for participation in research and teaching programs dealing with regenerative research, and encourages them to adopt affiliation with Institute members and to develop an interdisciplinary understanding of their particular areas of interest in regenerative biology; (3) fosters active, collaborative research programs among Institute members; (4) seek ways to expand and improve graduate and undergraduate instructional programs relating to regenerative research.

## Molecular Biology Institute

## Greg L. Harris, Director

The Molecular Biology Institute was established to serve interested departments of the biological and physical sciences in the coordination, support and enhancement of research and instruction in the molecular biological sciences. Interests and activities of the MBI encompass all approaches which aim to explain biology at the molecular level. The MBI sponsors a weekly seminar series that facilitates faculty and student interaction with scientists from other institutions. Currently, full members of the institute are drawn from the Departments of Biology, Chemistry and Biochemistry, and the School of Public Health, and participate in the respective Ph.D. programs. Associate members are drawn from a variety of disciplines that are cognate with the molecular biological sciences. The institute is also constituted as the university unit authorized to administer the master's degree program with
an emphasis in molecular biology. The research programs of the MBI members are supported by a variety of agencies including the National Institutes of Health, the National Science Foundation, NASA, the American Heart Association, the American Diabetes Association, the Muscular Dystrophy Association, the Department of Energy, the US Department of Agriculture, and the California Metabolic Research Foundation.

Additional information is available from the MBI office at 619-594-5655 or through the Master of Science degree website at http://www.bio.sdsu.edu/cmb/masters.html.

## Visualization (Viz) Center

Eric G. Frost, Director
The SDSU Visualization (Viz) Center uses computer visualization and communications to bear on societal problems. The Viz Center is focused on processing and providing data sets to the world for humanitarian assistance disaster relief (HADR) events such as earthquakes, tsunamis, volcanoes, wildfires; as well as poverty, sustainable resources, and first responders in their daily efforts to serve the public. The focus is on being a connecting resource between the campus, community, and the world in bringing together solutions to problems that information technology, imaging, data fusion, visualization, and decision support can assist. The Viz Center develops and deploys tools for homeland security and works closely with many of the homeland security academic and research groups on campus, at the SDSU Research Foundation (SDSURF), and regionally. The Viz Center provides the physical laboratory function for a DHS multi-year, grantfunded project to the SDSURF Regional Technology Center for the assessment of homeland security technologies, governance structures, and data needs on a regional basis. This effort has led to establishment of a national presence as SDSU becomes a leader in addressing homeland security issues. The Viz Center also collaborates with other institutions in Africa, Australia, Canada, Central Asia, China, Indonesia, and Mexico. We interact with companies to help deploy and develop technologies, especially for response to "all hazards" events.

## Watershed Science Institute (WSI)

Trent W. Biggs, Director
The Watershed Science Institute (WSI) promotes collaboration among SDSU researchers and communities involved in the management and regulation of land and water resources. The objective of WSI is to improve the integration of science, policy, and management of watersheds by aligning research questions with critical management needs. The regional focus is on Southern California, including San Diego County, Imperial Valley, and the US-Mexico Border region, all of which face critical challenges related to water resources and water quality, drinking water supply shortages, climate change, water quality deterioration, impaired surface water bodies, soil erosion, and coastal contamination. WSI has collaborators across the university, including faculty in biology, civil and environmental engineering, geography, mathematics and statistics, and public health, and is a university-wide institute housed in the Division of Research Affairs. Community collaborators include the City of San Diego Water Department, San Diego Coastkeeper, San Diego Regional Water Quality Control Board, San Diego River Conservancy, San Diego River Park Foundation, Southern California Coastal Water Research Project, and others. For more information, visit http://watershed.sdsu.edu.

## Field Stations Program

Paul Ganster, Director
The Field Stations Program provides opportunities for a broad community of students and faculty to explore the natural ecosystems of southern California. In addition, the field stations serve SDSU by functioning as a liaison to broader public community, highlighting SDSU's expertise regionally, nationally, and internationally. The Field Stations Program manage almost 9,000 acres of San Diego and Riverside county land for university teaching and research.

SDSU currently has four field stations: the Sky Oaks Field Station, 1,640 acres of high elevation redshank chaparral habitat in the Chihuahua Valley east of Temecula Valley; the Santa Margarita Ecological Reserve (SMER), a 4,464 acre reserve located along the upper Santa Margarita River inland from Camp Pendleton in San Diego and Riverside Counties; Fortuna Mountain, 231 acres close to the SDSU campus located within Mission Trails Regional Park; and the Tijuana River National Estuarine Research Reserve, a 2,513-acre reserve which serves as an auxiliary field station for SDSU.

Providing research and education opportunities for the future requires detailed knowledge of how changes in the environment outside the boundaries of a certain area affect ecosystem dynamics within that area. As habitat continues to be lost to development, areas such as the SDSU field stations will increase in importance as sites for studying natural ecosystems.

The proximity of sensitive habitats to a rapidly urbanizing landscape makes this region a recognized biodiversity "hot spot." San Diego State University has an extremely dynamic group of scientists (faculty, researchers, and students) working to understand these unique and threatened ecosystems. Research ranges from the global scale examining global warming and the impacts of increased carbon dioxide on native vegetation to the meso- and mico-scales of chaparral ecosystems dynamics, as well as plant, vertebrate, insect, and fungal diversity. Researchers at SDSU are also increasingly using sophisticated computer modeling and molecular techniques for analyzing environmental change. Natural sciences are the core users of the SDSU field stations. Biology, geography, geological sciences, hydrogeology, and other field sciences are consistent areas of study. There are growing opportunities for interdisciplinary work as well as for nontraditional study in the fields ranging from public health, civil and environmental engineering, recreation, business, and art, to education.

Persons interested in conducting research, instructional use, or access to the SDSU field stations should contact the academic programs of the SDSU Field Stations Program at 619-594-0580 or through the website at http://fs.sdsu.edu.

# SDSU Global Campus 

## Functions

The California State University regards the credit-bearing programs offered through Extended Education as integral parts of the institution. These programs are viewed as extensions of the institution's educational services and are in concert with the institution's overall mission and purpose. The programs and courses in Extended Education meet the standards of quality that the institution sets for its other programs and courses, with regard to resources, faculty, level of instruction, evaluation, and support services.

SDSU Global Campus serves as the principal university liaison with the adult community and provides a wide variety of traditional and nontraditional, credit and noncredit, educational experiences designed to fit the lifestyle and expectations of lifelong learners. Under the direction of the dean of the college, programs are developed and carried out within the divisions of Administrative Services, American Language Institute, and New and Existing Program Development. The programs are operated on a self-support basis since state funds are not provided for Continuing Education activities.

## Open University

Most regular on-campus courses are open to students through enrollment in Open University. Open University courses earn non-matriculated resident credit and enrollment for students not seeking an advanced degree or advanced certificate and does not require formal admission to the university. Enrollment in courses through Open University is on a space-available basis with the consent of the instructor. Students pay SDSU Global Campus fees for these units. The course repeat policy applies to courses repeated through Open University. Consult SDSU Global Campus or the current Class Schedule for complete details on Open University qualifications, fees, and registration procedures. A maximum of 24 units earned through Open University, extension credit, and credit-by-examination combined may be used toward total units required for the bachelor's degree.

Open University classes may not be taken by the following:

1. Non-matriculated foreign students (nonresidents from non-English-speaking countries) with a score of less than 61 iBT, 5.5 IELTS.
2. SDSU matriculated students.
3. Disqualified students - Undergraduate students who have been disqualified from SDSU will not be allowed to attend Open University or classes through Special Sessions until one year from the date of their disqualification. Graduate students will not be allowed for one semester following disqualification.

## Limitations on Open University, Special Sessions, and Extension Credit

Matriculated students may not enroll in courses through Open University.

Students who have not been admitted to the university may enroll in on-campus courses through Open University during the regular semester on a space available basis, provided all course prerequisites have been met. Courses taken through Open University prior to admission to the university may be transferred to meet graduate degree requirements with the approval of the graduate adviser and the graduate dean and are normally limited to nine units depending on the degree objective (see Acceptance of Transfer Courses).

Special Sessions programs are offered through SDSU Global Campus. A matriculated student who is not in a Special Sessions program may only take courses through Special Sessions if the course is not being offered through the regular session, if the student must take the course as part of their program of study, and if the course will not be offered again prior to the student's planned graduation date. In these cases, if the student is taking regular session courses, he or she will have to pay Special Sessions fees and regular session fees given they are enrolled in the regular session.

There is no limit on the total number of extension units for which a student may enroll; however, the maximum extension credit that may be used toward SDSU bachelor's degree requirements is 24 units. Courses offered through SDSU Global Campus for extension credit that are not offered on campus or are not required in a student's program of study will appear on the SDSU transcript but are not transferable for graduate credit. Graduate students who enroll in these courses normally do so for personal enrichment only. Courses offered through SDSU Global Campus numbered 500-899 may be transferred with the approval of the graduate adviser and the dean of the Division of Graduate Affairs.

For more information, visit http://www.neverstoplearning.net.

## American Language Institute (ALI)

The American Language Institute (ALI) is one of the most prestigious university-based English as a second language (ESL) programs in the U.S. The ALI is able to offer its students many different programs and courses such as academic, conversational, and business English; TOEFL, IELTS, GRE, and GMAT test preparations; study abroad; and teacher training. Programs offered by the ALI are as follows:

## International Business English (IBE)

This program benefitsstudents interestedinlearning more about American business practices while also improving their English communication skills. The IBE program has flexible start dates and does not require an English language examination for admission. Visit http://ali.sdsu.edu/ibe for more information.

## English for Academic Purposes (EAP)

EAP is a full semester or summer term program for students planning to enter San Diego State University or other colleges or universities at the undergraduate level. EAP students may be eligible to receive a TOEFL waiver after completing advanced levels, and those who are planning on getting an undergraduate degree at San Diego State University have the opportunity to apply for undergraduate conditional admission. Classes are offered in academic reading, writing, grammar, listening, note-taking, and speaking. Coursework is available in test preparation, pronunciation, and vocabulary. Students may also choose from over 15 elective course offerings. Visit http://ali.sdsu.edu/eap for more information.

## Intensive English for Communication (IEC)

IEC is a four or more week program designed for students and professionals at all levels who want to develop and improve their practical English skills. Classes include eight hours of oral communication in addition to 12 hours of reading, writing, grammar, and listening per week. Students can choose from a variety of electives, pronunciation clinics, and sports and conversation clubs. Visit http://ali.sdsu.edu/iec for more information.

## Pre-M.B.A. and Pre-Master's

This program prepares students for graduate degrees, including M.S., M.A., and M.B.A. Coursework includes GRE and GMAT test preparation. Visit http://ali.sdsu.edu/premba for more information

## Semester at SDSU

Students who meet SDSU's English proficiency requirement may register for 9 to 12 units through ALl's Semester at SDSU program. Visit http://ali.sdsu.edu/semester for more information.

## Teaching English as a Second or Foreign Language

 Certificate (TESL/TEFL)The ALI offers a TESL/TEFL certificate program for those with little or no previous English language teaching experience who would like to teach English abroad. Visit http://ali.sdsu.edu/tesIteflcertificate for more information.

## Customized Group Programs

The ALI offers customized English as a second language (ESL) programs for specialized adult groups in fields such as business, teacher training, law, health care, sports medicine, and others.

## Services

All full-time students at the institute are offered visa and immigration support and assistance, housing assistance, organized volunteer activities, field trips to popular tourist attractions, advising for university entrance, health services, and orientation to university life. Many SDSU campus facilities and activities are also available to ALI students. For the most current and detailed information on how to apply, please see the ALI website at http://ali. sdsu.edu or call 619-594-5907.

## Osher Lifelong Learning Institute at SDSU

The Osher Lifelong Learning Institute at SDSU offers a vibrant and diverse learning community for adults age 50 and better, with intellectually stimulating, university-quality courses, and engaging leadership and volunteer opportunities. There are no tests or grades, just the thrill of learning with like-minded peers. Course topics include art, culture, current events, history, literature, music, religion, science, and more. Most classes are held on the SDSU campus, with opportunities to attend special events and Edventures (educational excursions) at various locations. For more information, call 619-594-2863, e-mail osher@sdsu.edu or visit http://neverstoplearning.net/osher.

## Study Abroad

Faculty-led study abroad programs are designed in close collaboration with SDSU's academic colleges. Courses are taught by SDSU faculty members and take place in international locations during the summer, winter break, and spring break. Faculty-led study abroad programs offer SDSU resident credit and are open to SDSU students and the general public. For more information, call 619-594-9400, e-mail facultyledstudyabroad@sdsu.edu, or visit http://neverstoplearning.net/studyabroad.

## Certificate Programs

A complete listing of certificate programs is in the Summary of Curricula section of this catalog.

## SDSU Global Campus Courses

In order to meet the needs of the adult community as well as matriculated students, the college provides a variety of courses and workshops. For the convenience of adult students most courses are scheduled in the evenings or on weekends, on campus, off campus, or online.

SDSU Global Campus courses are offered each semester in a number of areas including education, business administration, public affairs, and the arts and sciences. Courses and programs are developed in cooperation with off-campus organizations, groups, and campus departments who have identified specific needs. Many courses are now offered online. These courses are listed on the SDSU Global Campus website at http://www.neverstoplearning.net. Some one-unit weekend courses are also offered throughout the year.

## Professional Development

Professional Development programs provide business and industry with certificates and workshops that are responsive to the training and development needs of their employees. Participants are kept abreast of the latest process improvement and leadership techniques to help ensure they will add to the productivity and profitability of their organizations.

## Certificates/Seminars/Workshops

Certificate programs provide career development to meet the needs of the workforce. Certificates are focused on topics relevant to key industry sectors and are recognized by most employers as a significant academic accomplishment.

Examples include construction, contract management, craft beer, human resources, hospitality, marketing, meeting and event planning, and project management.

In addition, the college develops and coordinates seminars and workshops aimed at increasing the skills of the business professional. These seminars are taught by local and national seminar leaders chosen from the business and academic worlds for their expertise and outstanding teaching ability. Topics addressed
cover a wide range of business subjects, such as leadership, supervisory training, marketing, project management, and cultural issues related to global competitiveness.

## Tailored On-Site Training

SDSU Global Campus develops and implements on-site training programs that meet specific needs of the San Diego business community. The programs serve medium as well as large businesses and organizations with topics ranging from team building and communication skills to supervision, leadership, process improvement, and project management. Program advisers and professional consultants are drawn from the academic and business worlds and have extensive practical experience. The programs offer significant value for the time invested and are designed with quality and adaptability to the workplace.

## Library and Information Access

## Administration

## Dean: Scott Walter

Associate Dean: Melissa Lamont (Interim)
Director of Access Services: Linda Muroi (Interim)
Director of Budget and Fiscal Operations: Sallee Spearman
Director of Information Technologies and
Digital Initiatives: Mark Figueroa

## Faculty

Emeritus: Baber, Carande, Cargille, Coleman, Dintrone, Etschmaier, Fikes, Goyne, Hall, Harkányi, Harley, Harris, McPhail, Palsson, Pease, Perkins, Puerto, Rogers, Savage, Sonntag, Sullivan, Turhollow, White, Wilson
Librarians: Jackson, Jeffery, Lamont, Muroi, Salem, Su, Weston
Associate Librarians: Bliss, Culbertson, Kiczek, Lach, Lanthorne, Lindsey, Nowicki, Payne, Ray, Rhodes, Tumlin, Wong-Welch
Senior Assistant Librarians: Harris, Henderson, Holvoet, Howser, Jarocki, Tully

## General Information

Located in the center of campus, Library and Information Access empowers students and faculty to explore ideas, collaborate with colleagues, develop projects, create knowledge, and cultivate academic success. The library is comprised of two buildings, the five-story Love Library and the Library Addition, with its landmark dome. Spanning more than 500,000 square feet, with nearly 4,000 seats for study and research, the library's importance to students, faculty, staff, and individuals living in the San Diego region is documented by more than 2.2 million annual visits.

## Hours and Access

The library is open to the public except on holidays, recess dates, and between 10:30 p.m. to 7:00 a.m. When the main library is closed, the $24 / 7$ Study Area is open only to current SDSU students, staff, and faculty. Hours are posted online or call 619-594-6721.

Registering for an SDSUid provides SDSU affiliates with access to online full-text articles from peer-reviewed journals. Students can find the library's catalog, course guides, subject guides for each major, and more at http://library.sdsu.edu/.

## Library Services

Librarians provide research assistance in person, telephone, e-mail, and online chat. They serve as subject specialists providing in-depth research support for each major on campus. The library has a comprehensive teaching program, which includes course-related instruction, online tutorials, blogs, videos, and tours.

University tutoring programs are hosted by the library in the Math Learning Center and the Writing Center.

The Library Computing Hub operates an extensive computer laboratory with over 300 computers, both Mac and PC. Resources include a help desk and access to a variety of applications. BuildIT, a makerspace with 3-D scanning and printing for students is located within the Hub.

Library Print Services also offers copying, poster printing, and instruction on SDSUcard use. Students can borrow a variety of equipment through the library, such as cameras, laptops, cables, and more.

The Wells Fargo Financial Laboratory, staffed by the Fowler College of Business, is hosted in the library with 12 Bloomberg
terminals for real-time financial literacy education for interested students. Fifty group study rooms can be found throughout the library. Reservations are required for rooms with technology, such as large collaborative monitors or presentation practice equipment. There are also food friendly areas, quiet study locations, and a coffee cart.

The library's Digital Humanities Center is home to a range of activities, including exhibits, interactive workshops, scholarly talks and lectures, and showcases.

## Holdings

The library's holdings exceed 1.5 million print titles with over 776,000 electronic books. With robust access to journals, the library transmits over one million articles annually. We maintain 23 unique collections of digital materials, having scanned over 90,000 items including, maps, photos, audio and video recordings, archival papers, and more. The library is also a depository for United States and California government publications.
Requests for books not available at SDSU can be made online or at an information desk. Partnerships with CSU Libraries via CSU+, local Circuit libraries, the global catalog WorldCat, and interlibrary loans support the delivery of items.
For help finding materials, students can consult staff at service desks located in Research Services, Circulation/Course Reserves, and Special Collections and University Archives.

## Special Collections and University Archives

Special Collections and University Archives houses rare, unique, and valuable books, periodicals, manuscripts, and documents which require care in handling. Ephemera, such as art prints, etchings, memorabilia, photographs, and postcards are kept in this area. Significant holdings include an extensive science fiction collection, comics and zines, and historical archives of the university. Noteworthy regional history collections include items from the civil rights era and the Chicano movement.
The Edward E. Marsh Golden Age of Science Fiction is the backdrop for special collections instruction and houses a collection of first editions by numerous Golden Age writers.

## SDSU Imperial Valley

## TELEPHONE: 760-768-5500

WEBSITE: http://www.ivcampus.sdsu.edu

## Administration

Dean: Gregorio A. Ponce
Associate Dean for Academic Affairs: Mark R. Wheeler
Assistant Dean for Student Affairs: Miguel Rahiotis
Director of Business and Financial Services: Maribel Madero
Director of Library Services:
Director of Advancement: Victor Nava

## Faculty

Emeritus: Ayala, Ballesteros, Coates, Dunn, Fatemi, Garrison, Hill, Livingston, Medeiros, Merino, Neumann, Payne, Polich, Roeder, Ryan, Sabath, Varela-Ibarra
Professors: Castañeda, Neumann, Pearson, Ponce, RamirezPimienta, Shumaker
Associate Professors: Altamirano, Boime, Cordero, Herrera, Stampfl
Assistant Professors: Abarbanell, Alonso, Camargo, Hernando Llorens, Jancsics, Kanaan, O'Donnell, Qin, Shamsalizadeh, Tang Lecturers: Fuentes, Hoyt, Kofford, Layaye

## General Information

SDSU Imperial Valley is a branch campus of San Diego State University serving the people of southeastern California. It is accredited as an integral division of SDSU and operates under the same academic calendar. Established in 1959, by an act of the State legislature, the campus offers the last two years of undergraduate education, graduate programs, and fifth year credential programs for teacher preparation. In addition, SDSU Imperial Valley offers first and second year undergraduate education through the First Time Freshman Program that is available to all students who wish to major in criminal justice or psychology. The Imperial Valley University Partnership is a part-time innovative collaboration between SDSU-IV, Imperial Valley College, and the Imperial County Office of Education for students planning to major in history, liberal studies, psychology, public administration, or Spanish (available for students who have received a score of 3 or higher on the Spanish Language Advanced Placement examination). SDSU Imperial Valley faculty are multinational in their classroom orientation and background. Smart classroom technology provides students the opportunity to participate in some classes broadcast live from the campus in San Diego. SDSU Imperial Valley schedules many of its classes in three-hour blocks so that students who work full-time can earn 9-12 units a semester by attending classes once or twice a week. Some classes are also offered on the weekends.

Student clubs, student government, lectures, art exhibits, and musical events enhance education for the approximately 1,000 students at SDSU Imperial Valley.

## Location

Imperial County has a population of approximately 180,000 people. SDSU-IV is located on two sites, Calexico and Brawley. Calexico is 110 miles east of San Diego, 55 miles west of Yuma, Arizona, and 120 miles south of Palm Springs. Interstate 8 and State Highways 111 and 86 connect the County to the rest of the country and state. The Calexico location, six blocks from the Mexican border, provides the opportunity for involvement in a bicultural environment. Just across the border is Mexicali, a city of more than one million people. The Brawley location is 24 miles north of the Calexico site. It is surrounded by rich agricultural fields and a rapidly emerging renewable energy industry.

## Curricula Offered

## Master's Degrees

Nursing Leadership in Health Care Systems (M.S.; in cooperation with the San Diego campus), Social Work (M.S.W.; in cooperation with the San Diego campus).

## Bachelor's Degrees

Criminal Justice (B.S.), English (B.A.), History (B.A.), Liberal Studies (B.A.), Mathematics (B.A.), Psychology (B.A.), Public Administration (B.A.), Registered Nurse - Nursing Program (B.S.; in cooperation with the San Diego campus), Social Science (B.A.), Spanish (B.A.).

## Minors

English, History, Linguistics, Mathematics, Psychology, Public Administration, Spanish.

## Certificate Programs

Public Administration, Single Subject Mathematics.

## Teaching Credentials

Basic
Multiple Subject, Multiple Subject with Bilingual Authorization: Spanish, Single Subject, Single Subject with Bilingual Authorization: Spanish.

## Specialist

Administrative Services, Special Education (in conjunction with the College of Education) Mild/Moderate Disabilities.

For further information on any of these degrees, see the SDSU Imperial Valley Bulletin.

## Freshman Programs

## First Time Freshman Program

The First Time Freshman Program is a full-time freshman program at SDSU Imperial Valley that is available to all students who wish to major in criminal justice or psychology. The full-time program offers an accessible, affordable, and high quality education with a clear path to earning a bachelor's degree in four years. The purpose of the program is to provide students in the Imperial Valley an opportunity to partake in an enriched university experience.

The First Time Freshman Program accepts students every fall. The program provides students full access to advising and mentoring, an academic plan for degree completion, student support services and resources, financial aid, scholarships, and campus activities/events. It employs features proven to increase student success, such as guaranteed access to classes, a freshman seminar course, student and parent orientations, and collaborative advising and mentoring.

## Imperial Valley University Partnership

Imperial Valley University Partnership is an innovative educational partnership between San Diego State University-Imperial Valley, Imperial Valley College, and the Imperial County Office of Education.

IVUP accepts students every fall. It is an accessible, affordable, high quality educational program with a clear path to a bachelor's degree in four years. The program is designed to provide students an enriched academic experience. It employs features proven to increase student success including a cohort structure, guaranteed access to classes, student and parent orientations, and a powerful emphasis on student advising and mentoring. IVUP is a dual admission program that offers majors in history, liberal studies (mathematics, science, and literacy), public administration, and Spanish (available for students who have received a score of 3 or higher on the Spanish Language Advanced Placement examination); and will include additional majors in the future.

The First Time Freshman Program and the Imperial Valley University Partnership accept admission applications for fall from October 1 to November 30 of the previous year. For additional information, visit http://ivcampus.sdsu.edu or call 760-768-5509.

## Exchange Programs and Study Abroad

Graduate and undergraduate students at the SDSU Imperial Valley can enhance their education and cultural awareness by taking part in several of the many opportunities available to study abroad.

SDSU offers over 350 education abroad programs in more than 50 countries. In addition to SDSU's own study abroad programs, students may participate in the California State University International Programs; the International Student Exchange Program (ISEP) Consortia; and other independent programs.

## Research Centers, Institute, and Partnership

## Professional Skills Development Center

Suzanna Fuentes, Director
The goal of the Professional Skills Development Center is to provide professional development training programs through conferences, symposiums, workshops, and certificate programs to the residents of the Imperial Valley, Mexicali, and several states in Mexico. The successful implementation of these programs is accomplished by partnering with important academic institutions in the private and public sectors. The Professional Skills Development Center makes SDSU-IV part of the community by attending local and international meetings, activities, and events.

Programs in the Imperial Valley focus on migrant education, the use of technology in education and in the workforce, and Medical Office Assistant Certification. The international training programs include pedagogical theory and practice focused on second language learners' language acquisition and assessment. The AMCO English Language Skills Assessment Program is responsible for the creation and implementation of English assessments internationally.

## Sustainable Energy Center (SEC)

## Asfaw Beyene, Director

Araceli Saucedo, Research Technician
The Sustainable Energy Center (SEC) is located in the heart of California's Imperial Valley, the United States' epicenter for renewable energy production. SEC promotes excellence in renewable energy education, outreach, and research. Through its emphasis on synergistic public and private sector partnerships, SEC fosters cutting-edge renewable energy research, provides academic and professional education relevant to California's energy future, and contributes to the social and economic development of Imperial County.

## San Diego State University, Imperial Valley Borderlands Institute

Carlos R. Herrera, Director
The SDSU-IV Borderlands Institute, founded in August 2013, promotes border-related scholarship and activities relevant to the Imperial, Mexicali, and Yuma valleys. The institute coordinates cultural exchange programs with Mexican institutions, fosters the university's role as an active participant in the trans-border community, hosts visiting scholars, and sponsors academic conferences and public lectures.

## USDA-HSI and SDSU Imperial Valley Partnership

Roberto González, Jr., Regional Director for
Southern California and Arizona
The USDA-HSI national program promotes partnerships and collaborations between U.S. Department of Agriculture (USDA) agencies and Hispanic Serving Institutions (HSIs). The partnership cultivates knowledge and develops leaders by linking USDA and higher education. For more information, stop by the Library Annex, Room 12B at SDSU Imperial Valley.

## Facilities

The Calexico campus is located on an eight-acre city block in the heart of Calexico's civic center along the Mexican border. The campus facilities create a pleasing architectural harmony of old and new structures surrounding a spacious central lawn area, the Rollie Carrillo Quad. Adjoining the quad, the library, Joseph Rodney Auditorium, and John Steppling Art Gallery provide academic and cultural resources for the entire community. Other buildings include classroom buildings, the administration building, faculty offices, computer labs, a bookstore, and the Student Union. The Brawley campus is a showcase of the latest instructional technologies, including a computer classroom, a video conference classroom, full computer and Internet presentation capabilities in all classrooms, as well as a computer laboratory for students to research and study individually or in groups. The Brawley campus is also the site of the Center for Energy Sustainability and its numerous renewable energy projects.

The library, located at the Calexico site, is designed to facilitate research and to provide a pleasant atmosphere for study. The collection's volumes, periodicals, and newspapers support the curricula offered at SDSU Imperial Valley. Services provided include reference assistance, CD ROM databases, personal computers for word processing, full text database, Internet access, interlibrary loans, and photocopying facilities.

Computer assistance is available in the computer laboratory. Both Macintosh and IBM compatible systems and Internet access are also available on campus.

## Prospective Student Center

The Prospective Student Center is dedicated to help prospecctive students decide if SDSU Imperial Valley is the right choice for them. Whether potential students are first-time freshmen, transfer students, family members, or community members, the Prospective Student Center staff advises on admissions requirements, the CSU application process, services on campus and other university-related information. The Prospective Student Center thrives to maintain positive relationships with all elementary schools, high schools, community colleges, and the public. For more information, call 760-768-5500 or visit the office located in Student Affairs.

## Student Retention Center

The Student Retention Center is a data-driven department that increases student persistence and completion rates by removing potential barriers or impediments to student success. The department aims to increase retention efforts and overall student success by having proactive contact with students, connecting them to the right resources on campus, as well collaborating with departments across the university to develop and support initiatives that enhance student support and success. For more information, call 760-768-5521 or visit the office located in Student Affairs.

## Admission and Registration

To apply for admission to SDSU Imperial Valley, students complete the Cal State Apply application online at http://www.calstate. edu/apply and have transcripts sent to the Office of Admissions, San Diego State University, 5500 Campanile Drive, San Diego, CA 92182-7455. Call 760-768-5667 for additional information.

After students have been admitted, they can register on the Internet using WebPortal, but only after fees are paid. Late registration is allowed during the first three weeks of the semester. Students wishing to late register must pay registration fees plus a $\$ 25.00$ late fee.

## Commencement

SDSU Imperial Valley holds its own commencement exercises each spring, in the Rollie Carrillo Quad, prior to commencement exercises on the San Diego campus.

## SDSU Imperial Valley Scholarships and

## Endowments

SDSU Imperial Valley students were awarded \$207,328 in scholarships for the 2018-2019 academic year. Information and applications for scholarships are available from the Financial Aid Office. Following is a list of scholarships and endowments established at SDSU Imperial Valley:

## Scholarships

Michael and Kerri Abatti
Alpha Omicron
Anheuser-Busch Companies, Inc.
David Ballesteros
Book Scholarship
William and Susan Brandt
Enrique Camarena Memorial
Centinela Solar Energy
Dean's Scholarship
J. Decker and M. Anderson

Margarita De Necochea
Francis and Edna Rae Frye
General Dynamics Land Systems
Good Sport Howie
Jack Hart Family
Herschel Hudson
Imperial Valley Campus
Imperial Valley University Partnership (IVUP)
Nancy Marlin
Sally McMahon Donors of Valley Endeavors (DOVES)
Alicia Mendoza
Alejandro and Florencia Nogales
Douglas and Barbara Patino
Joe and Dorothy Rodney
Rotary International District 5340
Ethan Singer
Title V Scholarship
Stephen and Susan Weber
Emily C. Wogaman

## Endowments

Michael and Kerri Abatti
Anheuser-Busch Companies, Inc.
David Ballesteros
Brandt Title V
William and Susan Brandt
Enrique Camarena Memorial
Francis and Edna Rae Frye
Jack Hart
Good Sport Howie
Herschel Hudson
Nancy Marlin
Sally McMahon - Donors of Valley Endeavors (DOVES)
Alejandro and Florencia Nogales
Douglas and Barbara Patiño
Jerry Pennington Memorial
Ralph and Eva Pesqueira
Joseph and Dorothy Rodney
Rotary International District 5340
Ethan A. Singer
Title V

## SDSU Imperial Valley - Calexico Campus Map

720 Heber Avenue
Calexico, CA 92231
760-768-5500


SDSU Imperial Valley Building Legend

1. North Classroom
2. Administration (Student Affairs)

2A. Art Gallery
3. Auditorium (classrooms)
4. Classrooms
5. Library (computer laboratories)

5A. Library Annex
6. Physical Plant
7. Computer Building/Campus Store
9. Faculty Offices East
10. Faculty Offices West (Enrollment Services)
11. CLAT-Classrooms
20. Student Center

## SDSU Imperial Valley - Brawley Campus Map

560 East Highway 78
Brawley, CA 92227
760-351-0806

in this section:
» Graduation Requirements for the Bachelor's Degree

# Graduation Requirements for the Bachelor's Degree 

The university will make every effort to preserve the requirements in this Graduation Requirements section for students subject to this catalog according to the provisions enumerated below. All other parts of the catalog are subject to change from year to year as university rules, policies, and curricula change. It is your responsibility to keep informed of such changes; failure to do so will not exempt you from whatever penalties you may incur.

The requirements appearing in this catalog are applicable to students under the following circumstances:

1. You may remain with the graduation requirements in effect during the academic year in which you entered SDSU, another campus in the CSU system, or a California community college, so long as you have remained in attendance at least one semester or two quarters within a calendar year in either the CSU or community college system. Absence due to an approved educational leave or for attendance at another regionally accredited institution of higher learning shall not be considered an interruption in attendance if the absence does not exceed two years. If you change or declare your majors in subsequent years, however, you must adopt the major and minor requirements in effect at the time of such change or declaration. You may continue with the earlier catalog only with regard to General Education and other graduation requirements. If you are disqualified from San Diego State University, you may maintain catalog rights for General Education purposes only by enrolling immediately in a California community college or another CSU campus. If you are subsequently reinstated after a break in continuous enrollment, you are subject to the requirements of the General Catalog in effect during the semester in which you reenroll in the CSU system or a California community college. If you have been disqualified twice from SDSU, you cannot be awarded an SDSU degree.
2. You may change to the catalog in effect in the year in which you graduate. Thus, students graduating in December 2020, May 2021, or in the 2021 summer term may adopt this catalog by so indicating on their application for graduation.

## I. Freshmen Competency Requirements: Mathematics and Writing

All students are required to demonstrate competency in basic mathematics and standard written English. Incoming freshmen must demonstrate competency in written communication and mathematics/quantitative reasoning based on multiple measures of academic proficiency.

Competency requirements are required preparation for a number of specific courses identified in the Class Schedule. No student may graduate until all competency requirements are satisfied.

## Mathematics Testing Requirements: Freshmen

The SDSU Mathematics/Quantitative Reasoning Assessment requirement is satisfied in one of the following ways:
A. Passing one of the following national or state tests at the minimum score* or level identified below^:

1. Score of 50 on the CSU Entry Level Mathematics Test (ELM) if taken after February 2002 and before September 2017 or an ELM score of 550 if taken before February 2002.
2. Score of 570 on the Scholastic Aptitude Test or Scholastic Assessment Test (SAT or SAT Subject Tests level 1 or level 2) in mathematics if taken after February 2016. Score of 550 on the Scholastic Aptitude Test or Scholastic Assessment Test (SAT or SAT Subject Tests level 1 or level 2 ) in mathematics if taken before March 2016.
3. Score of 23 on the American College Test (ACT) mathematics section if taken after October 1989.
4. Score of 3 or higher on the College Board Scholastic Advanced Placement (AP) Calculus AB or Calculus BC examination, Computer Science Principles, or the Statistics examination.
5. Score of 4-7 on the International Baccalaureate examination in Higher Level Computer Science or Higher Level Mathematics.
6. Score of 550 on the College Board Mathematics Achievement Test, Level I or IC or II or IIC if taken before March 2016.
7. Score of 550 on the College Board SAT II Mathematics Test, Level I or IC or II or IIC if taken before March 2016.
8. Result of "Standard Exceeded: Ready for CSU or participating CCC College-Level Coursework in Mathematics" on the CAASPP Early Assessment Program (EAP), augmented mathematics, taken in the 11th grade as part of the California Standards Test or Algebra II.
9. Result of "Standard Met: Conditionally Ready for CSU or participating CCC college-level coursework in mathematics" on the CAASP Early Assessment Program (EAP) examination and met the conditional requirement. The conditional requirement may be met by completing an approved mathematics course in the 12th grade and earning a grade of "C" or better. Students who do not meet the conditional requirement will need to participate in the SDSU's FAST summer program, unless exemption was met through one of the following:

- New SAT: A score between 520-560 on the mathematics section of the new SAT (if taken after February 2016).
- Old SAT: A score between 490-540 on the mathematics section of the old SAT Reasoning Test (if taken before March 2016).
- A score between 20-22 on the mathematics section of the American College Test (ACT).

[^1]OR
B. Based on freshman skills assessment and subsequent placement, students must successfully complete an approved General Education Mathematics/Quantitative Reasoning course and associated mathematics academic support course. STEM (Science, Technology, Engineering, and Mathematics) majors and the geography major with an emphasis in geographic information science and technology and the emphasis in water, climate, and ecosystems must successfully complete Mathematics 140 and 140X. Non-STEM majors must successfully complete one of the following pairs of courses: Mathematics 110 and 110X; Mathematics 210 and 210X; Psychology 280 and 280X; Statistics 119 and 119X; or Economics 201/Geography 104/Linguistics 270/Philosophy 120/Political Science 201/ Sociology 201 and Arts and Letters 201X. Undeclared students and interdisciplinary studies in three departments majors must successfully complete any of the pairs mentioned above.

## OR

C. Earn a satisfactory score on the SDSU Mathematics Placement Assessment.

## OR

D. Earn a C- or better grade in an approved transferable college mathematics course that satisfies CSU General Education in Mathematics/Quantitative Reasoning.

## Mathematics and Chemistry Departmental Placement Examinations

Prior to enrollment in certain mathematics and chemistry courses, students may be required to pass a Mathematics Placement Assessment or Chemistry Departmental Placement Examination as part of the stated prerequisites. These examinations assess mathematical or chemistry preparation beyond the elementary level. The Mathematics Placement Assessment tests knowledge of algebra and trigonometry as needed in Mathematics 124, 141, and 150. The Liberal Studies Mathematics Proficiency Assessment tests concepts relating to numbers and operations, geometry, and measurement. The Chemistry Department Placement Examination assesses student preparation to succeed in Chemistry 200 or 202.

## Writing Testing Requirements: Freshmen

The SDSU Written Communication Assessment requirement is satisfied in one of the following ways:
A. Pass one of the following national or state tests at the minimum score* or level identified below:

1. Score of 147 total on the CSU English Placement Test (EPT) if taken before September 2017.
2. Score of 550 on the Scholastic Aptitude Test or Scholastic Assessment Test (SAT) Evidence-Based Reading and Writing section if taken after February 2016. Score of 500 on the Scholastic Aptitude Test or Scholastic Assessment Test (SAT) critical reading section if taken before March 2016 and after March 1995. SAT verbal score of 470 if taken before March 1995.
3. Score of 22 on the American College Test (ACT) English test if taken after October 1989.
4. Score of 3 or higher on the College Board Scholastic Advanced Placement (AP) Language and Composition or Literature and Composition Test.
5. A score of 4-7 on International Baccalaureate examination for the Higher Level English A: Language and Literature or Higher Level English A: Literature.
6. Score of 600 on the College Board Achievement Test in English Composition with Essay (if taken before March 2016)
7. Score of 680 or above on the College Board SAT Writing section (if taken before March 2016)
8. Result of "Standard Exceeded: Ready for CSU or participating CCC College-Level Coursework in English" on the CAASPP Early Assessment Program (EAP) examination taken in the 11th grade as part of the English Language Arts California Standards Test
9. Result of "Standard Met: Conditionally Ready for CSU or participating CCC College-Level Coursework in English" on the CAASPP Early Assessment Program (EAP) examination and met the conditional requirement. The conditional requirement may be met by completing an approved English course in the 12th grade and earning a grade of "C" or better. Students who do not meet the conditional requirement will need to participate in the SDSU's FAST summer program, unless exemption was met through one of the following:

- New SAT: A score between 510-540 on the Evi-dence-Based Reading and Writing Section (if taken after February 2016).
- Old SAT: A score between 460-490 on the Critical Reading section of the old SAT Reasoning Test (if taken before March 2016).
- A score of 19-21 on the English section of the American College Test (ACT).

[^2]B. Based on freshman skills assessment and subsequent placement, students must successfully complete a two semester writing sequence: Rhetoric and Writing Studies 105A and 105B; or Linguistics 100A and 100B.

## OR

C. Pass with a C- or better an approved transferable college composition course that satisfies CSU General Education in Composition or Critical Thinking.

## II. Graduation Writing Assessment Requirement (GWAR)

All undergraduate students must demonstrate competency in writing skills at the upper division level as a requirement for the baccalaureate degree. (Students seeking a second bachelor's degree in nursing have satisfied the GWAR with their first baccalaureate degree from a college/university accredited by a regional accrediting association.) The Writing Placement Assessment (WPA) is a two-hour examination used to determine students' placement in upper division academic writing courses.
A. Students must take the WPA within the time frames described below. Once students are enrolled in Rhetoric and Writing Studies 280 or 281 [or Linguistics 281], they may not take the WPA to test out of an upper division writing course.

- Continuing Students. Continuing students must take the WPA during the semester in which they are completing 60 units or in the semester immediately following.
- Transfer Students. Transfer students are eligible to take the WPA once they have received an offer of admission. They must take the examination during their first semester at SDSU.
Students who do not take the examination by the end of the required time frame will not be able to register for future terms. Students may file a leave of absence for the next semester and maintain continuing student status. If the examination is completed during the leave of absence, the student may re-enroll the following semester. Students who have not taken the examination by the end of the leave of absence term will be required to file another leave of absence to maintain eligibility until the examination has been taken and a score is posted on the record. Students are allowed a maximum of four leaves of absence.
B. Writing Placement Assessment scores. Students who achieve a score of 10 on the WPA satisfy the statewide Graduation Writing Assessment Requirement and do not have to take a writing course unless an upper division writing course is required by their major.

Students who achieve a score of 8 are required to satisfy the Graduation Writing Assessment Requirement by completing an approved upper division writing course with a grade of $C$ or better. SEE LIST BELOW.

Students who earn a score of 6 or lower are required to complete Rhetoric and Writing Studies 280 (or Rhetoric and Writing Studies 281 [or Linguistics 281] if English is your second language) with a grade of $C$ or better before enrolling in one of the required approved upper division writing courses. The SDSU registration system will require students who earn a 6 or below to register for the required course in the semester following the testing time frame.
C. Students who transfer from another California State University campus having fulfilled the Graduation Writing Assessment Requirement will not be required to repeat it. However, a course listed below may be required for the major. Contact the Academic Advising Center if you believe you have fulfilled this requirement at another CSU.
D. Students are allowed to attempt the WPA twice within the timeframes and restrictions described above. Students may not drop a course in which they are registered if test results are received after the schedule adjustment deadline. Students must pay the required fees for the examination each time it is taken.
E. Approved upper division writing courses:

Accountancy 390W
Africana Studies 305W
Chicana and Chicano Studies 396W
Economics 449W
English 306W (Liberal Studies majors only)
English 308W
English 508W (Required for English and Comparative Literature majors; open to other majors)
English 581W
English 584W
History 390W
Humanities 390W
Journalism and Media Studies 310W
Journalism and Media Studies 312W
Linguistics 305W
Management Information Systems 396W
Political Science 390W
Recreation and Tourism Management 396W
Religious Studies 396W
Rhetoric and Writing Studies 305W
Rhetoric and Writing Studies 390W
Rhetoric and Writing Studies 392W
Rhetoric and Writing Studies 500W
Rhetoric and Writing Studies 503W
Rhetoric and Writing Studies 508W
Teacher Education 405W

## III. Major and Minor Requirements

A. Preparation for the major. Every major requires a set of introductory and/or skills courses designed to prepare the student for upper division study in that field. Courses taken for this purpose may also be used to satisfy General Education requirements if approved for General Education.
B. Major. Completion of a departmental or an interdisciplinary major is required. Students must meet major requirements in effect at time of declaration of major, provided continuous enrollment has been maintained, except as otherwise provided in the California Code of Regulations, Chapter 5, Section 40401, Election of Regulations. If a major is impacted, students must meet major requirements in effect at time of declaration of premajor, assuming continuous enrollment. A major is an area of specialized study which provides the student with extensive knowledge of the subject matter and its organizing concepts. It consists of 24 or more upper division units for the Bachelor of Arts, and Bachelor of Music; and of 36 or more units for the Bachelor of Science degree. At least half of the units must be completed at SDSU unless specifically waived by the department; however, in no case shall a student be allowed to complete fewer than 12 units in the major at SDSU. Units received through SDSU extension courses, with the exception of courses offered for resident credit during summer term and Open University, spring 1998 and thereafter, are not applicable to the residency requirement. Unless otherwise stated, a student may (with the approval of the department) apply no more than three units of coursework from a basic certificate program toward a major or minor.

A summary list of all majors appears at the close of this chapter; the full statement of requirements for each major can be found through the Index. Upper division courses taken in the major department may not be used to meet requirements in a minor. Courses graded credit (Cr) may not be used to fulfill upper division requirements in the major except for those courses identified in the course listing as graded $\mathrm{Cr} / \mathrm{NC}$.

A student may wish to major in up to three departments. If so, the requirements for each major must be satisfied. Units for courses which could satisfy the requirements in one or more majors are counted only once. At the time of graduation, a student with two or more majors will earn only one degree. The degree is associated with the first major. The diploma and transcript issued will note the one degree earned with all majors completed. Students seeking a second bachelor's degree in nursing are not eligible to declare an additional major. Students
admitted to SDSU with an Associate Degree for Transfer who add another major or minor that exceeds 60 units to complete these requirements violate the program's guarantee of graduation within 60 semester units.

A lower division student may request a change from one premajor to another premajor. An upper division student may request a change from one major to another major. A student may earn two majors in one department only where the specific combinations of majors are authorized by the department and the college. All requirements for both majors must be satisfied; units for courses which could satisfy requirements in both majors can be counted only once. In most cases, students pursuing two majors in one department will be required to file with the Office of the Registrar a master plan approved by the major department.

Time Limit on Completion of Requirements for the Major. As authorized by Title 5, California Code of Regulations, Section 40401, departments may require that specific academic requirements be met within seven years of granting an undergraduate degree. Such requirements will consist of advanced courses and examinations in areas of knowledge changing so rapidly that information may be obsolete after seven years. In those cases in which a student is required to repeat a course taken more than seven years previously, only the last grade will be used in computation of grade point averages.
C. Minor. Completion of a minor is necessary if required by the major; the decision otherwise to have, or not to have, a minor is left with the student. Students seeking a second bachelor's degree in nursing are not eligible to declare a minor. Like the major, the minor offers an integrated and coherent pattern of coursework, combining lower and upper division coursework in proportions appropriate to the various disciplines. A student may wish to minor in up to two departments. The minor shall consist of 15-24 units. Normally, 12 units of coursework in the minor will be upper division units. A minimum of six upper division units must be completed at SDSU. The minimum grade point average for awarding a minor at the time of graduation is 2.0 (C) or better in all units applicable toward a minor, including those accepted by transfer from another institution. Courses graded credit (Cr) may not be used to fulfill upper division requirements in the minor except for those courses identified in the course listing as graded $\mathrm{Cr} / \mathrm{NC}$. Courses numbered 296, 496, 596 may be applicable to the minor only with approval of the department chair. A summary list of all minors appears at the close of this chapter; the full statement of requirements for each minor can be found through the Index. Because special prerequisites must be met to qualify for certain minors, checking with the minor department before taking courses is advised. Courses in the minor may not be counted toward the major or another minor, but may be used to satisfy preparation for the major and General Education requirements. The completion of a minor reports only on an SDSU official transcript and does not print on the diploma. Declaration of a minor occurs by obtaining and filing a Declaration of Major or Minor form at the Office of the Registrar, Student Services West, Room 1641.

## IV. American Institutions Requirement

Title 5, California Code of Regulations, Article 5, Section 40404 requires that all students demonstrate an understanding of American history, the United States Constitution, and California state and local government.

The American Institutions requirement can be satisfied in any of four ways:
A. San Diego State University courses. By passing any one of the following pairs of courses (a maximum of six units may be applied to General Education):

Africana Studies 170A and 170B
American Indian Studies 140 and 141
Chicana and Chicano Studies 120A and 120B
Chicana and Chicano Studies 141A and 141B
History 109 and 110
History 109 and 410
Political Science 101 and 102

Political Science 101 and 320
Political Science 102 and 305 Political Science 102 and 321 Political Science 102 and 422 Political Science 305 and 320 Political Science 305 and 321 Political Science 305 and 422 Political Science 320 and 321 Political Science 320 and 422 Religious Studies 390A and 390B Women's Studies 341A and 341B
B. Transfer courses from accredited California colleges and universities.

1. Full Certification of American Institutions Requirement: Students transferring within California will fulfill the American Institutions requirement by providing certification on a transcript or other official document from a regionally accredited California university, liberal arts college, or community college that the requirement as outlined in Title 5, California Code of Regulations, Article 5, Section 40404 has been satisfied.
2. Partial Completion of American Institutions Requirement: Transfer credit may be used toward partial fulfillment of the American Institutions requirement.
3. Certification Based on High School Work: No certification based on high school work can be accepted.
C. Transfer courses from outside California or Advanced Placement credit. Students who have met both the American history and United States Constitution portion of the American Institutions requirement through any of the following:
4. Advanced Placement (AP) credit in American history or Government/Politics: American.
5. Course(s) in American history which cover a minimum of 100 years of U.S. history, including the establishment of the U.S. Constitution.
6. An American history course which covers a minimum of 100 years of history AND a course in American Government.

Student may elect to complete the California state and local government portion of the American Institutions requirement by either:
a. Taking the California Government examination available through the Testing Services office,
OR
b. Completing one of the following SDSU courses: Africana Studies 170B; American Indian Studies 141; Chicana and Chicano Studies 120B, 141B; History 110*, 410, 445; Political Science 102**, 320, 321, 422; Religious Studies 390B; Women's Studies 341B.
D. The student has previously earned a baccalaureate degree from a college/university accredited by a regional accrediting association. This exemption applies to students who are seeking a second bachelor's degree in nursing.

> *Credit will not be granted for this course if the student has taken an equivalent post-Civil War American history course or United States history AP credit.
> ${ }^{* *}$ Credit will not be granted for this course if the student has taken an equivalent American government course or Government/Politics: United States AP credit.

## V. Language Requirement

Students whose majors lead to the Bachelor of Arts degree in Liberal Arts and Sciences, the Bachelor of Music degree, Bachelor of Fine Arts degree in Dance, or a Bachelor of Arts degree in Applied Arts and Sciences in English must satisfy a language requirement in a language other than English as indicated below. Students whose majors lead to other degrees are not subject to this requirement.

Exclusion: Conversation courses may not be used to meet this requirement.

Native speakers from foreign countries where English is not the principal language and who have finished high school or the equivalent in that country will be considered to have satisfied the
language requirement and will not be given credit for taking lower division courses in their native language except with advance approval from the department.
A. The Bachelor of Arts degree in liberal arts and sciences (see exceptions above) require competency in a language other than English. Such competency can be demonstrated by:

1. Successfully completing the third college semester or fifth college quarter in a language other than English (minimum competency/units required).
2. Successfully completing the fourth-year level of high school courses in a language other than English.
3. Successfully completing a third-semester equivalent proficiency examination in a language other than English.
4. Graduating from high school (where English is not the major language of instruction) in a non-English speaking country.
5. Passing with a score of 3 or higher on an Advanced Placement (AP) examination in Chinese language and culture, French language and culture, German language and culture, Italian language and culture, Spanish language and culture or Spanish literature and culture; passing with a score of 4 in Japanese language and culture; or passing with a score of 5 in Latin.
6. Passing with a score of 4 to 7 on the higher level B examination for International Baccalaureate credit in Arabic, French, German, Hindi, Indonesian, Italian, Japanese, Korean, Mandarin Chinese, Norwegian, Russian, Spanish, or Swedish.

Students who are majoring in Art History, Asian Studies, Chicana and Chicano Studies, Comparative International Studies, European Studies, Humanities, International Economics, International Security and Conflict Resolution, Jewish Studies, Latin American Studies, Linguistics, Microbiology, and Social Science should also read the section on language requirement under their respective majors for special conditions and limits pertaining to those majors.

Courses offered at San Diego State University which satisfy the language requirement are:
Arabic 101, 102, and 201, or 202
Chinese 101, 102, and 201
Classics 101G, 202G, and 303G (Greek)
Classics 101L, 202L, and 303L (Latin)
Dual Language and English Learner Education 101, 102, and 201
Filipino 101, 102, and 201
French 100A, 100B, and 201 or 210 or 221
German 100A, 100B, and 202 or 205A or 205B
Hebrew 101, 102, and 201
Italian 100A, 100B, and 201 or 211 or 212
Japanese 111, 112, and 211
Korean 101, 102, and 201
Latin American Studies 110, 111, and 210 (Mixtec)
Persian 101, 102, and 201 or 202
Portuguese 101, 102 (or 110), and 203
Russian 100A, 100B, and 200A
Spanish 101, 102, and 201 or 202 or 281 or 282
B. The Bachelor of Music degree (except the specialization in Jazz Studies and Instrumental Performance) requires the completion of appropriate college level language courses as designated in the following specializations:

1. Music Education - the first semester in Spanish.
2. Performance (vocalists only) - the first semester in each of French, German, and Italian.
3. Global Composition and Professional Studies Track 2 the first semester in French, German, Italian, or Spanish.
4. Professional Studies Track 3 - the second semester in French, German, Italian, or Spanish.

Students may demonstrate competency by taking a test of reading knowledge. Consult with music faculty adviser.

Students with prior competency may take a test of reading knowledge administered by the foreign language department concerned in consultation with the School of Music and Dance.
C. The Bachelor of Fine Arts degree in Dance requires competency (equivalent to that which is normally attained in two semesters of college study) in a foreign language.
D. The Bachelor of Arts degree in applied arts and sciences in English requires competency (equivalent to that which is normally attained in two semesters of college study) in a foreign language.

## VI. Unit Requirements

A. Overall unit requirement. The minimum number of units necessary for a bachelor's degree (excluding courses numbered 99 and below; also courses numbered 397) is 120. Some majors and degrees have requirements that extend beyond the minimum number of units as listed below:

1. Bachelor of Arts degree in Applied Arts and Sciences. 120
2. Bachelor of Arts degree in Liberal Arts and Sciences 120
3. Bachelor of Science degree in Applied Arts and Sciences ..... 120
4. Bachelor of Science degree in Engineering ..... 127-138
5. Bachelor of Fine Arts degree in Dance ..... 132
6. Bachelor of Music degree. ..... 132
7. Integrated Teacher Education programs ..... 129-135The degree which applies to a particular student is determined by the student's choice of major. Each student should therefore consult the statement of his or her major to establish the applicable degree. The full statement of each major can be found by consulting the Index.
B. Upper division unit requirement. The total number of upper division units necessary for a bachelor's degree is as follows:
8. Bachelor of Arts degree in Applied Arts and Sciences.
9. Bachelor of Arts degree in Liberal Arts and Sciences ..... 40
10. Bachelor of Science degree in Applied Arts and Sciences. ..... 45
11. Bachelor of Fine Arts degree in Applied Arts and Sciences ..... 48
12. Bachelor of Music degree. ..... 48

Courses offering upper division credit are those numbered 300 through 599. All units from upper division courses (except those numbered 397 in any department) are applicable to the upper division unit requirement, including units from courses in the major and the minor, and from courses used to satisfy the American Institutions and the General Education requirements.
C. Unit limit totals. The maximum number of special units accepted for a bachelor's degree is as follows:

1. From transferable community and junior college courses70
2. From credit by examination (excluding AP/IBACC credit) ..... 30
3. From a total of all Extension, Open University,and correspondence courses (includes coursestaken before and after matriculation)24
(NOTE: Only 24 units from Extension, Open University, and Special Sessions courses combined will be accepted toward the degree when taken prior to admission as a non-matriculated student. There is no limit on Special Session courses completed after matriculation.)
4. From courses graded credit (Cr)* .. 15
5. From topics courses numbered $296,496,596 \ldots \ldots . . . . . . . . . . . . . . . .$.
6. From General Studies courses numbered 200 and 400 .
7. From courses numbered below 100 , and courses numbered 397. 0
8. From Special Study courses numbered 299, 499, 599
(NOTE: Examination credit awarded for a 299 course is excluded from the nine unit limit.)
9. From courses numbered 499 from one department (except Geological Sciences 499) 6
10. From Aerospace Studies, Military Science, and Naval Science courses. .24
11. From Music 170-189, 370-389, 570-589 (for non-major, music major for B.A. degree, and B.M. degree in Music Education, Global Composition, and Professional Studies).
12. From Music 170-189, 370-389, 570-589 (for music major for B.M. degree in Performance and Jazz Studies). .18
*Upper division courses in the major and minor must be taken for a letter grade unless they are offered only credit/no credit.

## D. Units in one department.

1. Bachelor of Arts degree in Liberal Arts and Sciences. The maximum number of units in any one department, lower and upper division combined, which can be applied toward the Bachelor of Arts degree in Liberal Arts and Sciences is 48, except in those majors outlined below:
a. For students majoring in Art with an emphasis in Studio Arts. .57
b. For students majoring in Chemistry with Certificate of the American Chemical Society ..... 49
c. For students majoring in Dance (Bachelor of Arts). ..... 59
d. For students majoring in English (courses in Comparative Literature, English, Rhetoric and Writing Studies). ..... 54
e. For students majoring in Geography with emphases in Environment, Sustainability, and Policy; Geographic Information Science and Technology; or Human Geography and Global Studies.57
f. For students majoring in Mathematics. ..... 60
g. For students majoring in Psychology. ..... 56
h. For students majoring in Russian ..... 53
i. For students majoring in Social Work. ..... 50
j. For students majoring in Spanish ..... 52
2. Bachelor of Fine Arts degree in Dance. The maximum num-ber of units in upper division dance courses acceptabletoward the Bachelor of Fine Arts degree in Dance is 70.
3. Bachelor of Music degree. The maximum number of units in upper division music courses acceptable toward the Bachelor of Music degree is 70 .

## VII. Residence Requirements

To qualify for a bachelor's degree, each of the following unit requirements must be completed at this university:
A. A minimum of 30 units total, of which at least 24 units must be in upper division courses (numbered 300-599).
B. At least half of the upper division units required for the major, unless waived by the major department; however, in no case shall the unit total be fewer than 12 upper division units.
C. If a minor is completed, a minimum of six upper division units in the minor.
D. At least nine units in upper division General Education courses shall be taken within the California State University (CSU) system.
(NOTE: Courses taken in Open University prior to spring 1998, for extension credit, and units earned through credit-by-examination may not be applied to these requirements.)
To qualify for a second bachelor's degree in nursing, students must complete a minimum of 30 post-baccalaureate units in residence at SDSU, of which at least 15 units must be upper division courses in the nursing major (numbered 300-599).

## VIII. Grade Point Average Requirements

Four averages, each 2.0 or better, are required for graduation including those students who are seeking a second bachelor's degree in nursing:
A. SDSU GPA - An average based on all courses attempted at SDSU.
B. Cumulative GPA - An average based on all courses attempted at SDSU and transferable courses at other universities, liberal arts colleges, and community colleges. The cumulative GPA for students seeking a second bachelor's degree in nursing is comprised of an average based on all courses attempted at SDSU and transferable courses at other universities, liberal arts colleges, and community colleges for any post-baccalaureate credit.
C. Major GPA - An average based on all upper division courses attempted in the major department. Upper division courses required for the major but taught outside the major department will also be included in the average.
D. Minor GPA - An average based on all units applicable to a minor, if a minor is being completed for the degree.
Information on the computation of averages can be found in the University Policies section of this catalog under Grades.

## IX. General Education

General Education profoundly influences undergraduates by providing the breadth of knowledge necessary for meaningful work, life-long learning, socially responsible citizenship, and intellectual development. This 49-unit program, which comprises over one third of an undergraduate's course of study, places specialized disciplines into a wider world, enabling students to integrate knowledge and to make connections among fields of inquiry.

The General Education program at SDSU prepares students to succeed in an increasingly complex and rapidly changing world. Our students will live and work in the context of globalization, scientific and technological innovation, cross-cultural encounters, environmental challenges, and unforeseen shifts in economic and political power. Through this program, students will acquire knowledge of human cultures and the physical and natural world that will enable them to engage significant questions, both contemporary and enduring.

To put their breadth of knowledge to work, students gain intellectual and practical skills such as inquiry and analysis, creative and critical thinking, written and oral communication, scientific and quantitative literacy, and technological-information proficiencies. Students practice these skills in progressively challenging venues, mastering learning outcomes from a series of courses drawn from the following sections: I, Communication and Critical Thinking; II and III, Foundations of Learning; and IV, Explorations of Human Experience. In order to acquire the skills required for advanced coursework within and across disciplines, student should complete these sections sequentially.

The General Education program at San Diego State University is evolving. A standing committee of faculty and students reviews the program continually and encourages the development of new courses, concepts, and learning experiences.

## Seven Essential Capacities Developed through General Education

In addition to mastering the specialized disciplinary knowledge typically associated with undergraduate majors, well-educated individuals acquire general abilities, habits of mind, or capacities that significantly enhance their intellectual and professional lives. Students come to understand how arguments-whether in journal articles, laboratory reports, lyrics, or manifestos-are constructed and evaluated; and they are able to craft persuasive cases in a wide variety of contexts. Students become familiar with the ways scholars-whether physicists or literary critics-theorize; and they are able to apply different kinds of theoretical models to realworld conditions. Students come to realize that most significant phenomena-from endangered species to British novels-cannot be understood in isolation because they are inevitably situated in complex webs or networks of interrelated phenomena; and they are able to locate concepts, ideas, texts, and events within these broader contexts. Students recognize the value of engaging
diverse and opposing principles, perspectives, and people to achieve political, intellectual, artistic, and social ends; and they grow competent in the sorts of negotiations such engagement requires. Students come to appreciate that local and global perspectives on subjects as diverse as policing, safe drinking water, and artistic trends are inevitably connected; and they can bring the two perspectives together. Students come to see that diverse concepts-from principles of harmony to supply and demandapply to multiple phenomena; and they are skilled in identifying the relevance of such concepts across traditional boundaries. Finally, students come to understand the intricate causal relationships between actions-whether giving a dowry or exploring space-and their effects; and they develop the ability to evaluate consequences in meaningful and responsible ways.

In order to develop these abilities in all our students, San Diego State University's General Education program will emphasize the following seven essential capacities:

1. Construct, analyze, and communicate arguments;
2. Apply theoretical models to the real world;
3. Contextualize phenomena;
4. Negotiate differences;
5. Integrate global and local perspectives;
6. Illustrate relevance of concepts across boundaries;
7. Evaluate consequences of actions.

It is important to note that although these essential capacities inform General Education, they are by no means its exclusive property. In fact, these fundamental abilities are to be further strengthened through students' major coursework. More specific goals of the various areas of General Education articulate directly with the seven essential capacities, in many cases manifesting the general abilities characterized-in rather abstract terms-by the capacities.

## Communication and Critical Thinking

Communication and Critical Thinking are essential skills that underlie all university education. Focusing particularly on argument, courses in this area of General Education help students understand the general function of writing, speaking, visual texts, and thinking within the context of the university at large, rather than within specific disciplines. In addition to featuring the basic rules and conventions governing composition and presentation, Communication and Critical Thinking courses establish intellectual frameworks and analytical tools that help students explore, construct, critique, and integrate sophisticated texts.

## Goals in Communication and Critical Thinking:

- Goal 1: Craft well-reasoned arguments for specific audiences.
- Goal 2: Analyze a variety of texts commonly encountered in the academic setting.
- Goal 3: Situate discourse within social, generic, cultural, and historic contexts.
- Goal 4: Assess the relative strengths of arguments and supporting evidence.


## Foundations of Learning

Foundations of Learning courses follow and build upon Communication and Critical Thinking courses and are offered by individual departments and interdisciplinary areas in the Natural Sciences and Quantitative Reasoning, Social and Behavioral Sciences, Humanities and Fine Arts, and Lifelong Learning and Self-Development. Foundations of Learning courses in the Natural Sciences and Quantitative Reasoning are divided into four categories: 1. Physical Sciences, 2. Life Sciences, 3. Laboratory, and 4. Mathematics and Quantitative Reasoning. Those in the Humanities and Fine Arts are divided into two categories: 1. Arts: Arts, Cinema, Dance, Music, Theatre, 2. Humanities: Literature, Philosophy, Languages other than English. Foundations of Learning courses introduce students to the basic concepts, theories, and approaches offered by disciplinary and interdisciplinary areas of study. They provide the foundation to understand and approach problems in the academy, and in local and global real-world environments. Consistent with class size and learning goals, they cultivate skills in reading, writing, communication, computation, information-gathering, and use of technology. Where appropriate,
courses intended as preparation for a major may also be designated as Foundations of Learning courses. Only lower division courses are designated as Foundations of Learning courses.

## Special Provision for Majors in the Sciences and Related Fields

Some majors require or recommend coursework in astronomy, biology, chemistry, geological sciences, or physics in preparation for the major. If you have declared one of these majors you may substitute those courses for courses listed under either Life Sciences or Physical Sciences (as appropriate) in Section II.A.

## Explorations of Human Experience

Explorations of Human Experience courses are upper division courses which allow concentrated or thematic study. In Explorations of Human Experience there are three areas of study - Natural Sciences and Quantitative Reasoning, Social and Behavioral Sciences, and Humanities and Fine Arts. Among these areas are courses designated as cultural diversity courses. Explorations of Human Experience courses take the goals and skills of Foundations of Learning courses to a more advanced level. This may find expression in one or more of the following pedagogical elements: greater interdisciplinary, more complex and in-depth theory, deeper investigation of local problems, and wider awareness of global challenges. More extensive reading, written analysis involving complex comparisons well-developed arguments, considerable bibliography, and use of technology are appropriate in many Explorations of Human Experience courses. Courses narrowly centered within one aspect of a discipline are more suited to major study than general education, which encourages students to relate their learning across the range of their educational experience. Explorations of Human Experience courses are upper division and cannot be used to fulfill this requirement if taken before students reach junior standing (passing 60 units).

## Areas of Study in Foundations of Learning and Explorations of Human Experience <br> A. Natural Sciences And Quantitative Reasoning

[CSU Area B - Scientific Inquiry and Quantitative Reasoning]

## Natural Sciences

Natural Sciences use the scientific process to study nature and represent an approach to the study of the universe and its natural laws and phenomena. Students achieve basic scientific literacy and thereby understand the scientific process including the value of observation, hypothesis testing, and experiments in the advance of science. Thus students require a general understanding of fundamental concepts and knowledge accumulated by the natural sciences. From that understanding, students develop an ability to reason about and follow new developments in the natural sciences, and to think in a scientifically informed manner about social and political issues that involve science and technology.

## Goals for GE Courses in the Natural Sciences

- Goal 1: Explain basic concepts and theories of the natural sciences.
- Goal 2: Use logic and scientific methods to analyze the natural world and solve problems.
- Goal 3: Argue from multiple perspectives about issues in natural science that have personal and global relevance.
- Goal 4: Use technology in laboratory and field situations to connect concepts and theories with real-world phenomena.


## Quantitative Reasoning

Quantitative reasoning refers to a range of academic capacities that includes learning from data, communicating quantitatively, analyzing evidence and assertions, and employing quantitative intuition. While quantitative reasoning is essential to sciences, other disciplines require the ability to use and comprehend quantitative language. To do this, students require the ability to analyze and interpret data in both scientific and social contexts. By possessing this set of mathematical and problem solving skills, students will be able to engage effectively in quantitative situations arising in life and work.

## Goals for GE Courses in Quantitative Reasoning

- Goal 1: Apply appropriate computational skills and use basic mathematical concepts to analyze problems in natural and social sciences.
- Goal 2: Use methods of quantitative reasoning to solve and communicate answers to real-world problems.


## B. Social and Behavioral Sciences

[CSU Area D - Social Sciences]
The Social and Behavioral Sciences focus on human behavior, cognition, and organization from anthropological, economic, geographic, historical, linguistic, political, psychological and sociological perspectives. Students gain an understanding of society and culture, as well as individual and social interaction processes. Disciplines within the Social and Behavioral Sciences employ the scientific method and utilize both quantitative and qualitative techniques to analyze the diversity and complexity of human experience. Through interdisciplinary learning, students explore the relationships between human societies and the physical environment.
Goals for GE Courses in the Social and Behavioral Sciences

- Goal 1: Explore and recognize basic terms, concepts, and domains of the social and behavioral sciences.
- Goal 2: Comprehend diverse theories and methods of the social and behavioral sciences.
- Goal 3: Identify human behavioral patterns across space and time and discuss their interrelatedness and distinctiveness.
- Goal 4: Enhance understanding of the social world through the application of conceptual frameworks from the social and behavioral sciences to first-hand engagement with contemporary issues.


## C. Humanities and Fine Arts

[CSU Area C]
The Humanities and Fine Arts encompass works of the imagination, such as art, literature, film, drama, dance, and music, and related scholarship. Students better understand human problems, responsibilities, and possibilities in changing historical contexts and diverse cultures, and in relation to the natural environment. Students acquire new languages and familiarize themselves with related cultures. They gain the ability to recognize and assess various aesthetic principles, belief systems, and constructions of identity. Students acquire capacities for reflection, critique, communication, cultural understanding, creativity, and problem solving in an increasingly globalized world.

## Goals for GE Courses in the Humanities and Fine Arts

- Goal 1: Analyze written, visual, or performed texts in the humanities and fine arts with sensitivity to their diverse cultural contexts and historical moments.
- Goal 2: Develop a familiarity with various aesthetic and other value systems and the ways they are communicated across time and cultures.
- Goal 3: Argue from multiple perspectives about issues in the humanities that have personal and global relevance.
- Goal 4: Demonstrate the ability to approach complex problems and ask complex questions drawing upon knowledge of the humanities.


## D. Lifelong Learning and Self-Development

[CSU Area E]
Lifelong Learning and Self-Development facilitate understanding of the human being as an integrated physiological, social, and psychological organism. Students learn about such matters as human behavior, sexuality, nutrition, health, stress, key relationships of humankind to the social and physical environment, and implications of death and dying. This lower division requirement in Lifelong Learning and Self-Development integrates three kinds of inquiry (though not necessarily with equal emphasis): 1. Sociological: in this context, the relationships between an individual and broader society; 2. Physiological: the human body as an integrated organism with systemic functions such as movement, nutrition, growth, reproduction,
and aging; and 3. Psychological: the study of the mental processes that create consciousness, behavior, emotions, and intelligence.
Goals for GE Courses in Lifelong Learning and Self-Development:

- Goal 1: Develop cognitive, physical, and affective skills to become more integrated and well-rounded individuals in society.
- Goal 2: Comprehend various behaviors conducive to physiological health and development.
- Goal 3: Identify and apply strategies leading to psychological well-being.
- Goal 4: Develop strategies to be integrated physiological, socio-cultural, and psychological beings engaged in learning and self-development throughout their lives.


## E. Cultural Diversity Requirement

One explorations course in areas $\mathrm{A}, \mathrm{B}$, or C must be a course in cultural diversity, as indicated by an asterisk. Cultural diversity courses focus on the theoretical and practical factors of age, class, disability, ethnicity, gender, gender identity, immigration, nation, race, religion, sexuality, socioeconomic status, and other significant markers of social identity. Courses meeting this requirement examine the complexity of diversity through an analysis of differential inequities, oppression, power, and privilege. Cultural diversity courses focus on non-dominant views and perspectives.

## Goals for GE courses meeting the diversity requirement:

- Goal 1: Enhance understanding of the diverse efforts and strategies used by groups to transform and/or dismantle structures of oppression.
- Goal 2: Foster reflection and appreciation of non-dominant perspectives, their contribution to society and culture, and models for their inclusion.
- Goal 3: Analyze the intersection of the categories of various dimensions of difference as they affect cultural groups' members lived realities and/or as they are embodied in personal and collective identities.
- Goal 4: Formulate informed views on the mechanisms for maintaining existing power structures and their impact on all sectors of society.


## General Education

## Requirements and Limitations

You must complete all requirements in sections I to IV for a total of 49 units. Because you must be a junior (60 units) to satisfy the upper division section IV requirement, you should not register for upper division GE courses until the semester in which you complete 60 units. Only those courses listed in the General Education areas may be used to satisfy General Education requirements.

Within these 49 units, the following limitations apply:

1. Explorations of Human Experience courses shall not be taken sooner than the semester in which you pass 60 units.
2. Credit/No Credit grades cannot be used in section I, Communication and Critical Thinking or section II.A.4., Mathematics/Quantitative Reasoning.
3. Courses numbered 296, 299, 496, 499, 500-level and above cannot be used in General Education.

## Transfer Students - Additional Information

If you fall into one of the following four categories, you must complete only section IV, Explorations of Human Experience, to satisfy your General Education requirements:

1. You transferred from a California community college and have completed the Intersegmental General Education Transfer Curriculum (IGETC)
2. You transferred from a California community college and are certified as having completed the 39 unit lower division CSU General Education pattern (Sections I to III)
3. You transferred from another California State University campus and have completed all lower division General Education requirements at the CSU campus
4. You transferred from a University of California campus and have completed all lower division General Education requirements at the UC campus.
Your previous college must provide SDSU with proof of completion, either a GE certification or a statement of completion from a University of California campus. Remember, you may not take Explorations of Human Experience courses sooner than the semester in which you complete 60 units.

If you completed one or more areas of CSU General Education pattern at a California community college or another CSU campus, some of the SDSU General Education area requirements may be met. If you have transfer courses from a California community college, a CSU or UC campus (but have not completed any General Education area), these courses may be used in the appropriate area of the SDSU General Education pattern. Consult with an adviser at the Academic Advising Center to determine which requirements you must complete.

If you transferred from a private college in California or from a non-California college, you must meet the requirements listed below. A transfer course will be used when equivalent to the listed SDSU course.

## Second Bachelor's Degree Students in Nursing Additional Information

Students seeking a second bachelor's degree in nursing have satisfied all requirements in sections I to IV of General Education with their first baccalaureate degree from a college/university accredited by a regional accrediting association.

## Freshmen Registration Requirements

All students entering SDSU as freshmen are required to register for a specific sequence of lower division General Education courses in the areas of I.1. Oral Communication, I.2. Written Communication, I.3. Critical Thinking, and II.4. Mathematics/Quantitative Reasoning. Freshmen must begin the required sequences in their first semester and continue in subsequent semesters until they complete the sequences. The registration system will enforce enrollment in the required courses. This enforcement will occur every semester until the required sequences are completed.

## Specialized General Education Patterns

Liberal Studies majors should refer to the description of their major in the Courses and Curricula section of this catalog for a listing of General Education requirements.

## I. Communication and Critical Thinking (9 units)

[CSU Area A - English Language Communication and Critical Thinking]

You may not use Credit/No Credit grades in this section. A grade of C - (1.7) or better is required. Complete one course from each of the following three sections.

## 1. Oral Communication.

[CSU subarea A1]
Africana Studies 140. Oral Communication.
Chicana and Chicano Studies 111A.
Oral Communication ..
Communication 103. Oral Communication................................ 3
2. Written Communication
[CSU subarea A2]
Africana Studies 120. Composition.
American Indian Studies 120. Written Communication......... 3
Chicana and Chicano Studies 111B.
Written Communication ............................................................. 3
English 100. Rhetoric of Written Argument................................ 3
[Same course as Rhetoric and Writing Studies 100]
Linguistics 100B. English Composition for
International Students and English Learners II.. ... .3

Rhetoric and Writing Studies 100. Rhetoric of Written Argument. .. 3
Rhetoric and Writing Studies 105B. Rhetoric of Written Argument Stretch II. ... 3

## 3. Critical Thinking

[CSU subarea A3]
Africana Studies 200. Intermediate Expository Writing and Research Fundamentals3

American Indian Studies 225. Expository Writing and Research
Chicana and Chicano Studies 200. Intermediate Expository Research and Writing .....  3
English 200. Rhetoric of Written Arguments in Context .....  3[Same course as Rhetoric and Writing Studies 200]

Linguistics 200. Advanced English for International Students 3
Philosophy 200. Critical Thinking and Composition ..... 3
Rhetoric and Writing Studies 200. Rhetoric of WrittenArguments in Context. 3[Same course as English 200]
Rhetoric and Writing Studies 220. Rhetoric ofWritten Arguments and the Tutoring of Writing 3
II. and III. Foundations of Learning (31 units)
A. Natural Sciences and Quantitative Reasoning.
[CSU Area B - Scientific Inquiry and Quantitative Reasoning]
Complete one course from each of the following four sections. (For majors in the sciences and related fields refer to the Special Provision for Majors in the Sciences and Related Fields section.)

1. Physical Sciences
[CSU subarea B1]
3
Astronomy 101. Principles of Astronomy
3
Astronomy 201. Astronomy for Science Majors
Chemistry 100. Introduction to General Chemistry with Laboratory. ..... 4
Chemistry 102. Introduction to General, Organic, and Biological Chemistry with Laboratory. ..... 5
[For Nursing majors only.]
Engineering 250. Introduction to Renewable Energy .....  3
Environmental Science 100. Environmental Sciences. ..... 3
[Same course as Sustainability 100]
Geography 101. Earth's Physical Environment. .....  3
Geography 103. Weather and Climate .....  3
Geological Sciences 100. Planet Earth .....  3
Geological Sciences 104. Earth Science .....  3
Natural Science 100. Physical Science .....  3
Oceanography 100. The Ocean Planet ..... 4
Sustainability 100. Environmental Sciences. ..... 3
[Same course as Environmental Science 100]
2. Life Sciences[CSU subarea B2]
Anthropology 101. Human Biocultural Origins ..... 3
Biology 100. General Biology ..... 3
Biology 101. World of Animals ..... 3
3. Laboratory
[CSU subarea B3]
Astronomy 109. Astronomy Laboratory. .....  1
Biology 100L. General Biology Laboratory ..... 1
Biology 101L. World of Animals Laboratory .....  1
Chemistry 100. Introduction to General Chemistry with Laboratory ..... 4
Chemistry 102. Introduction to General, Organic, and Biological Chemistry with Laboratory. ..... 5
[For Nursing majors only.]
Geography 101L. Earth's Physical Environment Laboratory1
Geological Sciences 101. Dynamics of the Earth Laboratory ..... 1
Oceanography 100. The Ocean Planet ..... 4
4. Mathematics/Quantitative Reasoning
[CSU subarea B4]
You may not use Credit/No Credit grades in this section
A grade of $\mathrm{C}-(1.7)$ or better is required.
Administration, Rehabilitation and Postsecondary
Education 201. Introductory Statistics and Research Design for Education ..... 3
Biology 215. Biostatistics. ..... 3
Computer Science 100. Computational Thinking .....  3

* Economics 201. Statistical Methods ..... 3
General Studies 147. Data Literacy: Human Choices Behind the Numbers ..... 3
* Geography 104. Geographic Information Science and Spatial Reasoning. .....  3
* Linguistics 270. Elementary Statistics for Language Studies ..... 3
* Mathematics 110. Mathematics for Life ..... 3
Mathematics 118. Topics in Mathematics ..... 3
Mathematics 120. Calculus for Business Analysis ..... 3
Mathematics 124. Calculus for the Life Sciences ..... 4
- Mathematics 140. College Algebra. ..... 3
Mathematics 141. Precalculus ..... 3
Mathematics 150. Calculus I. ..... 4
Mathematics 151. Calculus II. ..... 4
* Mathematics 210. Number Systems in Elementary Mathematics. ..... 3
Mathematics 211. Geometry in Elementary Mathematics..... 3 ..... 3
Mathematics 245. Discrete Mathematics
Mathematics 252. Calculus III. ..... 4
Mathematics 254. Introduction to Linear Algebra. ..... 3
* Philosophy 120. Introduction to Logic. ..... 3
* Political Science 201. Elementary Statistics for Political Science ..... 3
* Psychology 280. Statistical Methods in Psychology. ..... 4
Public Health 250. Infections and Epidemics .....  3
* Sociology 201. Elementary Social Statistics ..... 3
* Statistics 119. Elementary Statistics for Business ..... 3
Statistics 250. Statistical Principles and Practices ..... 3
B. Social and Behavioral Sciences.
[CSU Area D - Social Sciences]Complete three courses taken from a minimum of two dif-ferent departments ( 9 units). Courses that also fulfill the Amer-ican Institutions requirement are identified below [AI]. Refer tosection IV. American Institutions Requirement. No more thansix units of American Institutions courses may apply to GeneralEducation.Administration, Rehabilitation and PostsecondaryEducation 205. Exploring Leadership.3
* Africana Studies 101. Introduction to Africana Studies ..... 3
${ }^{*}$ Africana Studies 170A. Afro-American History [AI]. ..... 3
${ }^{*}$ Africana Studies 170B. Afro-American History [AI]. ..... 3
${ }^{*}$ American Indian Studies 140. U.S History froman American Indian Perspective to 1870 [AI]....................... 3
* American Indian Studies 141. U.S. History from an American Indian Perspective Since 1870 [AI]3
Anthropology 102. Introduction to Socio-Cultural Anthropology ..... 3
Anthropology 103. Introduction to Archaeology and World Prehistory ..... 3
Asian Studies 100. State and Society in the Asia Pacific ..... 3
* Chicana and Chicano Studies 120A. Chicana andChicano Role in the American Political System [AI]........... 3
*Approved General Education mathematics course for undeclared and non-STEM majors.
${ }^{\circ}$ Approved General Education mathematics course for STEM majors.
${ }^{\mathscr{H}}$ Ethnic studies course.
* Chicana and Chicano Studies 120B. Chicana and Chicano Role in the American Political System [AI]........... 3
${ }^{*}$ Chicana and Chicano Studies 141A. History of the United States [AI] .............................................. 3
\% Chicana and Chicano Studies 141B. History of the United States [AI]... 135. Child and Family Development 135. Principles of Family Development.......................................... 3
Economics 101. Principles of Economics ..................................... 3
Economics 102. Principles of Economics ................................... 3
Finance 250. Financial Literacy.................................................... 3
General Studies 280.
Introduction to Civic Engagement.................................................. 3
General Studies 290.
Introduction to Undergraduate Research ............................. 3
Geography 102. People, Places, and Environments............... 3
Geography 106. World Regional Geography ............................. 3
Geography 170. Sustainable Places and Practices................. 3
Gerontology 101. Introduction to Human Aging ....................... 3
History 109. American History to Reconstruction [AI]............ 3
History 110. American History Since the Civil War [AI]........... 3
Journalism and Media Studies 200.
Introduction to Contemporary Media .................................... 3
Latin American Studies 101. Introduction to Latin American Studies................................... 3
Linguistics 101. Introduction to Language .................................. 3
Linguistics 251. Dialects of English .............................................. 3
Political Science 101. Introduction to American
Politics in Global Perspective [AI].......................................... 3
Political Science 102. Introduction to American and California Government and Politics [AI]......................... 3
Political Science 103. Introduction to Comparative Politics.. 3
Political Science 104. Global Politics.. ..... 3
Psychology 101. Introductory Psychology. ..... 3
Science 250. Informal Learning and Instruction of Mathematics and Science ..... 3
[Same course as Teacher Education 250]

Sociology 101. Introductory Sociology: The Study of Society.. 3
Sociology 102. Introduction to Social Problems ..... 3
Speech, Language, and Hearing Sciences 150. Sign Languages and Deaf Culture . .....  3
Teacher Education 250. Informal Learningand Instruction of Mathematics and Science ....................... 3[Same course as Science 250]

Women's Studies 103. Women and Global Justice .3
C. Arts and Humanities. Complete at least one course from each area ( 9 units).

1. Arts: Art, Cinema, Dance, Music, and Theatre
[CSU subarea C1]
Art 133. Modern Making 3
Art 157. Introduction to Art ..... 3
Art 258. Introduction to Art History I .....  3
Art 259. Introduction to Art History II .....  3
Dance 181. Introduction to Dance .....  3
English 157. Comics and History .....  3
[Same course as History 157]3
History 157. Comics and History. ..... 3
[Same course as English 157]
Music 151. Introduction to Music. .....  3
Television, Film and New Media 160. Cinema as Art. ..... 3
Theatre 100. The Art of Theatre ..... 3
Theatre 120. Heritage of Storytelling .....  3
Theatre 205. American Musical on Stage and Screen .....  3
2. Humanities: History, Languages other than English,Literature, Philosophy, Religious Studies
[CSU subarea C2]
${ }^{*}$ Africana Studies 240. Africana Intellectual Thought .....  3

* Africana Studies 260. Africana Literary Study. .....  3
* American Indian Studies 110. American Indian Heritage .....  3
* American Indian Studies 210.
Indigenous Women and the Arts .....  3
Arabic 101. Elementary Arabic I. .....  4
Arabic 102. Elementary Arabic II .....  4
Arabic 201. Intermediate Arabic I .....  4
Arabic 202. Intermediate Arabic II. .....  4
Arts and Letters 222.
Art, Sport, and Culture in Contemporary Brazil. .....  3
Asian Studies 101. Asian Thought and Cultures .....  3
Asian Studies 110. Elementary Conversational Chinese. .....  3
[Same course as Chinese 100]
${ }^{\text {\% }}$ Chicana and Chicano Studies 100.
Chicana and Chicano Heritage .....  3
Chinese 100. Elementary Conversational Chinese. .....  3
[Same course as Asian Studies 110]
Chinese 101. Elementary Chinese I. .....  5
Chinese 102. Elementary Chinese II .....  5
Chinese 201. Intermediate Chinese I .....  5
Chinese 202. Intermediate Chinese II. .....  5
Classics 101G. Ancient Greek I. .....  5
Classics 101L. Latin .....  5
Classics 120. English Words from Latin and Greek .....  3
Classics 140. Introduction to Classics .....  3
Classics 202G. Ancient Greek II. .....  5
Classics 202L. Latin II. ..... 5
Comparative Literature 270A. World Literature .....  3
Comparative Literature 270B. World Literature .....  3
Construction Engineering 101. Construction and Culture....
ual Language and English Learner Education 101American Sign Language I
Dual Language and English Learner Education 102.American Sign Language II.4
Dual Language and English Learner Education 201.American Sign Language III. 4
English 220. Introduction to Literature .....  3
European Studies 101. Introduction to European Studies .....  3
European Studies 160. European Reflections on Science and Technology.. .....  3
Filipino 101. Elementary Filipino I. .....  4
Filipino 102. Elementary Filipino II .....  4
Filipino 201. Intermediate Filipino .....  4
French 100A. Elementary French I .....  5
French 100B. Elementary French II. .....  5
French 201. Readings in French .....  3
French 210. French Grammar. .....  3
French 221. Speaking and Writing French .....  4
German 100A. First Course in German. .....  5
German 100B. Second Course in German .....  5
^ German 150. Contemporary German Culture and the New Europe .....  3
German 202. Readings in German.. .....  3
German 205A. Third Course in German. .....
German 205B. Fourth Course in German. .....  4
Hebrew 101. Elementary Hebrew I .....  4
Hebrew 102. Elementary Hebrew II .....  4
Hebrew 201. Intermediate Hebrew. .....  4

[^3]History 100. World History ..... 3
History 101. World History .....  3
History 102. World History Through Science and Technology .....  3
History 105. Western Civilization to the Seventeenth Century ..... 3
History 106. Western Civilization Since the Sixteenth Century .....  3
Humanities 101. Introduction to Humanities. .....  3
Humanities 102. Global Humanities. .....  3
Humanities 130. The Jewish Heritage .....  3
[Same course as Jewish Studies 130]
Humanities 140. World Mythology .....  3
Italian 100A. Elementary Italian I. ..... 5
Italian 100B. Elementary Italian II .....  5
Italian 201. Reading and Speaking Italian . .....  3
Italian 211. Intermediate Italian I .....  4
Italian 212. Intermediate Italian II. .....
Japanese 111. Elementary Japanese I. .....  5
Japanese 112. Elementary Japanese II .....  .5
Japanese 211. Intermediate Japanese I .....  5
Japanese 212. Intermediate Japanese II .....  5
Jewish Studies 130. The Jewish Heritage .....  3
[Same course as Humanities 130]
Korean 101. Elementary Korean I. .....  5
Korean 102. Elementary Korean II.. .....  5
Korean 201. Intermediate Korean I ..... 5
Korean 202. Intermediate Korean II. ..... 5
Latin American Studies 110. Elementary Mixtec I. ..... 4
Latin American Studies 111. Elementary Mixtec II.. ..... 4
Latin American Studies 120. Elementary Zapotec I ..... 4
Latin American Studies 210. Intermediate Mixtec I. .....
Linguistics 243. Invented Languages - Klingon and Beyond!. ..... 3
Persian 101. Elementary Modern Persian I ..... 4
Persian 102. Elementary Modern Persian II. .....  4
Persian 201. Intermediate Persian I. .....  4
Persian 202. Intermediate Persian II. .....  4
Philosophy 101. Introduction to Philosophy: Ethics .....  3
Philosophy 102. Introduction to Philosophy: Knowledge and Reality .....  3
Portuguese 101. Elementary Portuguese I. .....  5
Portuguese 102. Elementary Portuguese II .....  5
Portuguese 110. Beginner Portuguese for Spanish Speakers .....  3
Portuguese 203. Intermediate Portuguese I .....  3
Portuguese 204. Intermediate Portuguese II. ..... 3
$\wedge$ Portuguese 250. Women's Literature in the Portuguese-speaking World. .....  3
Religious Studies 100. Exploring the Bible. .....  3
Religious Studies 101. World Religions .....  3
Religious Studies 102. Exploring the Qur'an .....  3
Religious Studies 103. American Religious Diversity. .....  3
Rhetoric and Writing Studies 250. Rhetoric in Everyday Life .....  3
Russian 100A. Beginning Russian 1 .....  5
Russian 100B. Beginning Russian 2. .....  5
$\wedge$ Russian 110. Slavic Legends and Tales. .....  3
Russian 200A. Intermediate Russian 1. .....  5
Russian 200B. Intermediate Russian 2 .....  5
^ Russian 250. Russian Culture in a Digital World. ..... 3
Spanish 101. Introduction to Spanish I. .....  4
Spanish 102. Introduction to Spanish II .....  4
Spanish 201. Intermediate Spanish I. .....  4
Spanish 202. Intermediate Spanish II.. .....  4
Spanish 211. Intermediate Conversation and Reading . .....  3

Spanish 212. Intermediate Conversation and Writing............ 3
^ Spanish 250. Women's Literature in the Hispanic World...... 3 Spanish 281. Intermediate Spanish for Heritage Language Learners I .. 3
Spanish 282. Intermediate Spanish for Heritage Language Learners II .....  3
Women's Studies 102. Women: Images and Ideas. ..... 3
III. Lifelong Learning and Self-Development
[CSU Area E]
${ }^{*}$ Africana Studies 102. An Afrocentric Responseto Generational Trauma.3
${ }^{*}$ Chicana and Chicano Studies 275. Sports and Race ..... 3
${ }^{*}$ Chicana and Chicano Studies 280.Youth Studies in Racialized Contexts 3
Child and Family Development 170. Child and
Adolescent Development from a Cultural Perspective.. .....  3
[Same course as Teacher Education 170]
Communication 245. Interpersonal Communication. .....  3
Dance 281. Dance, Popular Culture, and Identity. ..... 3
General Studies 150. Building Your Future Self for Success in College and Beyond. ..... 3
History 114. Sports in American History. .....  3
History 125. Sexuality, Past and Present. ..... 3
History 150. Why History Matters .....  3
Humanities 201. The Body: Identity, Crisis, Resistance .....  3
Journalism and Media Studies 210. Social Media in the Digital Age ..... 3
Lesbian, Gay, Bisexual, and Transgender Studies 101. Introduction to LGBTQ+ Studies ..... 3
Linguistics 252. Language Across the Lifespan. .....  3
Nursing 253. Stress and Human Health.. ..... 3
Philosophy 140. Technology and Human Behavior. ..... 3
Professional Studies and Fine Arts 100 Sustainable Self-Development.. ..... 3
Psychology 117. Health, Happiness, and Academic/ Professional Success. ..... 3
Recreation and Tourism Management 200.Recreation, Travel, and Self-Awareness. 3
Religious Studies 258. Death, Dying, and Afterlife .....  3
Sociology 115. Body and Society ..... 3
Teacher Education 170. Child and AdolescentDevelopment from a Cultural Perspective 3
[Same course as Child and Family Development 170]
Women's Studies 101. Gender: Self, Identity, and Society. ..... 3
IV. Explorations of Human Experience
Courses in this area must not be taken sooner than the semes-ter in which you achieve upper division standing (60 units passed).Nine units of upper division General Education courses shall betaken within the California State University (CSU) system.

Complete one course each in areas A, B, and C (9 units). One course must be a course in cultural diversity, designated by an *.
A. Natural Sciences. Complete one course.
[CSU upper division Area B]
Anthropology 355. Exploring Primate Behavior. ..... 3

* Anthropology 360. From the Grave
Modern Forensic Anthropology... .....  3
* Anthropology 402. Dynamics of Biocultural Diversity. ..... 3
Astronomy 303. A Walk Through the Stellar Graveyard ..... 3
Astronomy 310. Astrobiology and the Search for Extraterrestrial Life .....  3
Biology 307. Biology of Sex ..... 3
Biology 315. Ecology and Human Impacts on the Environment. ..... 3
Biology 317. World of Dinosaurs. .....  3

[^4]Biology 324. Life in the Sea ..... 3
Biology 327. Conservation of Wildlife ..... 3
Biology 335. The Human Body .....  3
Biology 336. Principles of Human Physiology .....  3
Chemistry 300. Forensic Science .....  3
Chemistry 308. Chemistry as a Unifying Science ..... 3
Computer Science 301. Computers and Society ..... 3
Environmental Engineering 320. Designing Solutions for Environmental Problems .....  3
Environmental Science 301. Energy and the Environment. ..... 3
Environmental Science 302. Climate Change Solutions ..... 3
Exercise and Nutritional Sciences 331. Exercise and
Nutrition for Health, Fitness, and Performance ..... 3
General Studies 340. Confronting AIDS ..... 3
Geography 303. Severe Weather ..... 3
Geological Sciences 301
Geology of National Parks and Monuments. ..... 3
Geological Sciences 303. Natural Disasters. ..... 3
Geological Sciences 305. Water and the Environment .....  3
Mathematics 303. History of Mathematics .....  3
Nursing 350. Women's Health Across the Lifespan ..... 3
Nutrition 313. Contemporary Nutrition. ..... 3
Oceanography 320. Oceans of Change ..... 3
Women's Studies 382. Gender, Science, and Technology. ..... 3
B. Social and Behavioral Sciences. Complete one course.
[CSU upper division Area D]
Courses that also fulfill the American Institutions require-ment are identified below [AI]. Refer to section IV. AmericanInstitutions Requirement. No more than six units of AmericanInstitutions courses may apply to General Education.
Africana Studies 320
Political Economy of African Diaspora. ..... 3

* Africana Studies 321
Black Political Participation in America ..... 3
* Africana Studies 322 African American Political Thought .....  3
* Africana Studies 341.Cultural Patterns and African American Identity3
Africana Studies 380
Blacks in the American Justice System .....  3
* Africana Studies 421. Black Urban Experience ..... 3
Africana Studies 455 Africana Class, Gender, and Sexualities ..... 3
* Africana Studies 473. Women in Africa ..... 3
${ }^{\text {\% A American Indian Studies 320. American Indians }}$ in Contemporary Society .....  3
${ }^{\text { }}$ American Indian Studies 420. Indian Peoples of California. ..... 3
${ }^{\%}$ American Indian Studies 451. American Indian Identity ..... 3[Same course as Anthropology 451]
*American Indian Studies 460. American Indian Languages..... 3[Same course as Anthropology 460 and Linguistics 460]${ }^{*}$ American Indian Studies 480.Issues in American Indian Education ............................................ 3
Anthropology 333.
Race, Ethnicity, and Identity in the Americas. ..... 3
[Same course as Latin American Studies 333]
Anthropology 348. Historical Archaeology. .....  3
* Anthropology 350. Cultures Around the Globe ..... 3
* Anthropology 353. Sustainability and Culture. ..... 3
[Same course as Sustainability 353]
* Anthropology 404. Evolution of Human Behavior ..... 3
Anthropology 410. Language in Culture .....  3
* Anthropology 439. Cultural Comparisons Through Film ..... 3
* Anthropology 440Mesoamerican Civilization Before the Europeans .................... 3
* Anthropology 442. Cultures of South America .............................. 3
${ }^{\text {* }}$ Anthropology 451. American Indian Identity .................................. 3 [Same course as American Indian Studies 451]
* Anthropology 460. American Indian Languages. .. 3 [Same course as American Indian Studies 460 and Linguistics 460]
Arts and Letters 301. Concepts and Ideas in Science and Technology Studies ..... 3
Asian Studies 300. Asia's Global Future.......................................... 3
* Asian Studies 320. Asian Environmental Issues............................. 3

Asian Studies 353.
Language and Social Interaction in China.................................. 3 [Same course as Chinese 353]
${ }^{+\pi}$ Asian Studies 460.
Contemporary Issues in Filipino-American Communities...... 3 [Same course as Filipino 460]
${ }^{*}$ Chicana and Chicano Studies 301. Political Economy of the Chicano People .................................... 3
${ }^{\text {\% }}$ Chicana and Chicano Studies 303. Chicana and Chicano Community Studies .................................. 3

* Chicana and Chicano Studies 320. Chicana and Chicano Lifestyles..
* Chicana and Chicano Studies 355. The United States-Mexico International Border......................... 3 [Same course as Latin American Studies 355] Chinese 353. Language and Social Interaction in China.................................... 3 [Same course as Asian Studies 353]
Child and Family Development 437. Violence in Relationships.3
Communication 321. Introduction to Health Communication. ..... 3
* Communication 371. Intercultural Communication ..... 3
Counseling and School Psychology 300. Stress Management and Life Planning.......................................... 3
* Counseling and School Psychology 420. Popular Culture and Counseling. 3
Economics 330. Comparative Economic Systems ..... 3
* Economics 464. Economic Problems of Latin America .....  3
Education 350. Education in American Society. .....  3
Education 484. Valuing Human Diversity .....  3
* European Studies 320. Food Culture in Europe. .....  3
Exercise and Nutritional Sciences 318 Sport, Games, and Culture .....  3
Exercise and Nutritional Sciences 330
Exercise and Wellness Across the Lifespan .....  3
${ }^{+\pi}$ Filipino 460
Contemporary Issues in Filipino-American Communities .....  3[Same course as Asian Studies 460]
* General Studies 420. Disability and Society. .....  3
* General Studies 480. Engaged Citizenship and Social Responsibility .....  3
* Geography 312. Culture Worlds .....  3
Geography 320. California. .....  3
Geography 321. United States .....  3
* Geography 324. Latin America .....  3
Geography 336. Europe .....  3
* Geography 340. Geography of Food .....  3
Geography 354. Geography of Cities .....  3
Geography 370. Conservation Science and Policy.. .....  3
* Gerontology 360. Diversity and Aging. .....  3
* Gerontology 370 Images of Aging in Contemporary Society .....  3
* Health and Human Services 350 Applied International Health and Human Services .....  3
* History 404. History of Human Rights ..... 3

[^5]${ }^{\mathscr{H}}$ Ethnic studies course.
+Either Asian Studies 460/Filipino 460 (IV.B.) or Asian Studies 422/History 422 (IV.C.) may be taken for General Education credit.
History 410. United States History for Teachers [AI]. ..... 3
History 413. United States History for Teachers for Liberal Studies Majors [AI]. ..... 3
History 445. California History [AI] .....  3

* Honors College 413
Interdisciplinary Perspectives on Social Problems ..... 3
[Maximum GE credit 3 units]
* International Security and Conflict Resolution 300Global Systems .3
* International Security and Conflict Resolution 301 Conflict and Conflict Resolution .....  .3
International Security and Conflict Resolution 310 Our Global Future: Values for Survival .....  3
International Security and Conflict Resolution 320 International Security in the Nuclear Age .....  3
International Security and Conflict Resolution 324 Politics of Global Resistance and Solidarity. .....  3
* Latin American Studies 325. Political Economy of Brazil ..... 3
Latin American Studies 333. Race, Ethnicity, and Identity in the Americas. .....  3
[Same course as Anthropology 333]
Latin American Studies 350.
Globalization and the Americas .....  3
* Latin American Studies 355.
The United States-Mexico International Border ..... 3
[Same course as Chicana and Chicano Studies 355]
Latin American Studies 425.
IIIness, Health, and Healing in Latin America .....  3
* Latin American Studies 430 Immigration and Border Politics. ..... 3
[Same course as Political Science 430]
* Lesbian, Gay, Bisexual, and Transgender Studies 321. LGBT Identities in the Modern World. ..... 3
Linguistics 350. Language and Politics .....  3
Linguistics 354. Language and Computers .....  3
Linguistics 420. Linguistics and English .....  3
Linguistics 452. Language Acquisition .....  3
Linguistics 454. Second Language Acquisition .....  3
* Linguistics 460. American Indian Languages. .....  3
[Same course as American Indian Studies 460and Anthropology 460]
Nursing 351. Exploring Healthcare in America .....  3
* Political Science 300. Islam and Politics ..... 3
Political Science 301A. History of Western Political Thought ... 3
Political Science 301B. History of Western Political Thought.... 3
Political Science 302. Modern Political Thought .....  .3
Political Science 305. American Political Thought [AI]. .....  3
Political Science 320. The U.S. Constitution [AI] .....  3
Political Science 321. State Politics [AI]. .....  3
* Political Science 334. Politics of the Environment .....  3
[Same course as Sustainability 334]
* Political Science 336.
Women's Issues in the American Political Process ..... 3
Political Science 347A. American Constitutional Law Institutional Powers and Constraints [AI] .....  3
Political Science 347B. American Constitutional Law Civil Rights and Civil Liberties [AI] .....  3
Political Science 356. Politics of Europe .....  3
* Political Science 359. Government andPolitics of Russia and the Commonwealth............................... 3* Political Science 361. Governments and Politics of theDeveloping Areas 3
* Political Science 362.Governments and Politics of East Asia ...................................... 3
* Political Science 363. Governments and Politics of the Middle East........................... 3
* Political Science 365. Chinese Politics. ..... 3
Political Science 370. Political Violence. ..... 3
Political Science 422. Urban Politics [AI]. .....  3
* Political Science 430. Immigration and Border Politics ..... 3
[Same course as Latin American Studies 430]
Political Science 435.
Power and Poverty in the United States ..... 3
* Professional Studies and Fine Arts 381.
Cross-Cultural Interpretations of Gambling Addiction ..... 3
Psychology 340. Social Psychology. ..... 3
Psychology 351. Psychology of Personality. .....  3
Public Health 330. Plagues Through the Ages ..... 3
Public Health 353. Human Sexuality and Disease ..... 3
* Public Health 362. International Health. ..... 3
Recreation and Tourism Management 304 Leisure and Tourism. ..... 3
Recreation and Tourism Management 305. Wilderness and the Leisure Experience. ..... 3
* Recreation and Tourism Management 404 Cross-Cultural Perspectives of Tourism. ..... 3
Religious Studies 343. Sociology of Religion ..... 3
[Same course as Sociology 338]
Religious Studies 390A.Religion and American Institutions (D) [AI]............................... 3
Religious Studies 390B
Religion and American Institutions (D) [AI]. ..... 3
* Social Work 350. Cultural Pluralism ..... 3
Social Work 360. Perspectives on
Human Behavior and the Social Environment ..... 3
* Sociology 320. Sex and Gender in Contemporary Society ..... 3
Sociology 330. Culture and History of Surfing .....  3
Sociology 335. Sociology of Popular Culture. ..... 3
Sociology 338. Sociology of Religion ..... 3[Same course as Religious Studies 343]
Sociology 350. Population and Contemporary Issues ..... 3
Sociology 352. Global Social Problems ..... 3
* Sociology 355. Sociology of Race and Ethnicity ..... 3
Sociology 410. Social Psychology: Mind, Self, and Society ..... 3
Sociology 421. American Families ..... 3
Sociology 430. Social Organization .....  3
Sociology 436. Sociology of Health and Illness ..... 3
Sociology 450. Social Change .....  3
Sociology 460. Technology and Society. ..... 3
* Spanish 462. Language Variation in the Spanish-Speaking World. ..... 3
* Sustainability 334. Politics of the Environment ..... 3
[Same course as Political Science 334]
* Sustainability 353. Sustainability and Culture ..... 3[Same course as Anthropology 353]
* Women's Studies 310. Global Cultures and Women's Lives ..... 3
* Women's Studies 320. Socialization of Women. ..... 3
* Women's Studies 325. Psychology of Women ..... 3
* Women's Studies 331. Women in Asian Societies ..... 3
Women's Studies 341A. Women in American History [AI]. ..... 3
Women's Studies 341B. Women in American History [AI].. ..... 3
* Women's Studies 370. Women, Law, and Policy ..... 3
*Women's Studies 375. Sex, Power, and Politics. ..... 3
C. Humanities. Complete one course.
[CSU upper division Area C]
* Africana Studies 365A. African American Literature to 1900 ..... 3[Same course as English 365A]
Africana Studies 365 B
African American Literature After 1900 ..... 3
[Same course as English 365B]
* Africana Studies 385. African American Music ..... 3

[^6]*^ Africana Studies 465. Africa in Literature and Film ..... 3
[Same course as French 465]
${ }^{*}$ Africana Studies 466. Afrofuturism ..... 3
${ }^{\text {\% }}$ Africana Studies 470. Comparative History: Afro-American and African Heritage ..... 3
${ }^{\text {\% }}$ Africana Studies 472. African Enslavement ..... 3
${ }^{\text {* }}$ American Indian Studies 300.American Indian Oral Tradition........................................................ 3

* American Indian Studies 430.
American Indian Poetry and Fiction ..... 3
* American Indian Studies 435. Indians Through Film and Television. .....  3
${ }^{\text {² }}$ American Indian Studies 440. American Indian History ..... 3
* American Indian Studies 470.
American Indian Spirituality and Epistemologies ..... 3
[Same course as Religious Studies 470]
* Anthropology 349. Roots of Civilizations ..... 3
* Anthropology 422. Music and Culture ..... 3
* Anthropology 424.
The Supernatural in Cross-Cultural Perspective ..... 3
[Same course as Religious Studies 424]
Arabic 301. Advanced Arabic I ..... 4
Arabic 302. Advanced Arabic II ..... 4
*^ Arabic 330. Arabic Culture ..... 3
* Arabic 350. Advanced Conversational Arabic ..... 4
Arabic 360. Advanced Arabic Grammar ..... 3
Art 357. World Art in Contemporary Life ..... 3
Art 380. Architecture That Changed Our World ..... 3
*^ Asian Studies 321. Korean Civilization ..... 3
[Same course as Korean 321]
* Asian Studies 351. Chinese Philosophy ..... 3[Same course as Philosophy 351]
* Asian Studies 421. Asian History Since 1600 ..... 3[Same course as History 421]
${ }^{+\pi}$ Asian Studies 422. Asian American Experiences ..... 3[Same course as History 422]
Asian Studies 425. The Vietnam War ..... 3[Same course as History 425]*^ Asian Studies 430Contemporary Korean Culture Through Media......................... 3[Same course as Korean 430]
* Asian Studies 458. Asian TraditionsSame course as Religious Studies 458]
* Asian Studies 490. Study Abroad in Asian Studies.Maximum GE credit 3 units]
** Chicana and Chicano Studies 310
Mexican and Chicano Music ..... 3
[Same course as Latin American Studies 310]
Chicana and Chicano Studies 335
Chicana and Chicano Literature. ..... 3
[Same course as English 335]
${ }^{\text {\% }}$ Chicana and Chicano Studies 350A.Chicana and Chicano History ..........Chicana and Chicano History ......3
${ }^{*}$ Chicana and Chicano Studies 350B.icana and Chicano Studies 375.3
US/Mexico Border History Chicana and Chicano Studies 375 ..... 3Chicana and Chicano Studies 376.
Chicana and Chicano Culture and Thought. ..... 3
* Chicana and Chicano Studies 380 US/Mexico Borderlands Folklore ..... 3
[Same course as Latin American Studies 380]
${ }^{\text {\% }}$ Chicana and Chicano Studies 400.Mexican Images in Film.................................................................... 3[Same course as Latin American Studies 400]
*Chicana and Chicano Studies 450 ..... 3
Chinese 301. Advanced Chinese I. ..... 3
Chinese 302. Advanced Chinese II .....  3
Classics 303G. Reading Greek Prose .....  3
Classics 303L. Reading Latin Prose ..... 3
Classics 304G. Reading Greek Poetry .....  3
Classics 304L. Reading Latin Poetry .....  3
Classics 310. Greek and Roman Myth and Legend. .....  3
Classics 320. Epic and the Novel .....  3
Classics 330. Comedy, Tragedy, Actors, and Audiences .....  3
Classics 340. Gods, Gladiators, and Amazons .....  3
Classics 350. Classics and Cinema .....  3
* Classics 360. Sex, Gender, and the Erotic in the Ancient World .....  3
*omparative Literature 440. African Literature .....  3
* Comparative Literature 445 Modern Latin American Literature .....  3
* Comparative Literature 470. Folk Literature .....  3
* Dance 382. Dance in World Cultures .....  3
English 301. The Psychological Novel. .....  3
English 305. Literature and the Environment .....  3
* English 335. Chicana and Chicano Literature ..... 3
[Same course as Chicana and Chicano Studies 335]
* English 365A. African American Literature to 1900 .....  3
[Same course as Africana Studies 365A
* English 365B. African American Literature After 1900 .....  3
[Same course as Africana Studies 365B]
English 401. Childhood's Literature .....  3
English 409. Science Fiction. ..... 3
* English 450. LGBT Literature and Culture .....  3
English 494. Modern Fiction of the United States. .....  3
European Studies 301. Contemporary Europe .....  3
European Studies 424. European Cinema ..... 3
European Studies 430. Muslim Experience in Europe. .....  3
European Studies 435. Culture and Identity in Post-Communist Europe ..... 3
European Studies 440. Human Trafficking in Europe .....  3
French 301. Advanced Grammar and Composition .....  3
French 302. Advanced Grammar and Translation .....  3
French 305A. Survey of French Literature .....  3
French 305B. Survey of French Literature .....  3
French 421. French Civilization. ..... 3
French 422. Contemporary France .....  3
*^ French 424. French Cinema and Theory .....  3
*^ French 465. Africa in Literature and Film .....  3
[Same course as Africana Studies 465]
General Studies 450. Life and Culture Semester Abroad .....  3
German 300. Readings in Contemporary German Culture .....  3
German 301. Grammar and Composition .....  3
^ German 320. German Film. .....  3
* History 402. History of Childhood ..... 3
* History 406. History of Sexuality.. .....  3
History 407. Early Modern Europe .....  3
History 408. Modern Europe .....  3
* History 415. Pre-Contact and Colonial Latin America .....  3[Same course as Latin American Studies 415]
* History 416. Modern Latin America ..... 3
* History 420. Asian History to 1600 ..... 3
* History 421. Asian History Since 1600 .....  3
[Same course as Asian Studies 421]
${ }^{+\pi}$ History 422. Asian American Experiences .....  3
[Same course as Asian Studies 422]
* History 425. The Vietnam War ..... 3
[Same course as Asian Studies 425]
* History 436. Modern Jewish History in Feature Films ..... 3
*Cultural diversity course.
$\wedge$ Taught in English.
${ }^{\mathscr{H}}$ Ethnic studies course.
†Either Asian Studies 460/Filipino 460 (IV.B.) or Asian Studies 422/History 422 (IV.C.) may be taken for General Education credit.
\#Taught bilingually.
History 440. The Holocaust and Western Civilization. ..... 3
History 441. Unnatural Disasters: History of Current Environmental Problems .....  3
History 442. People From Our Past. ..... 3
History 455. Introduction to Digital History. .....  3
* History 473. Middle Eastern History from the Advent of Islam to 1500 .....  3
* History 474. The Middle East Since 1500 .....  3
* History 488. Modern Jewish History .....  3
Humanities 310. French Culture .....  3
* Humanities 322. LGBT History and Culture. .....  3
[Same course as Lesbian, Gay, Bisexual,and Transgender Studies 322]
Humanities 330. Russian Culture .....  3
Humanities 360. Animal Humanities .....  3
Humanities 370. American Culture .....  3
^ Humanities 380. Japanese Culture ..... 3[Same course as Japanese 380]
Humanities 405. Faith and Hope .....  3
[Same course as Religious Studies 405]
Humanities 406. Renaissance and Self. ..... 3
Humanities 407. Rationalists and Romantics. .....  3
Humanities 408. The Modern ..... 3
Humanities 409. The Future. .....  3
Humanities 410. Studies in Popular Culture. .....  3
* Humanities 411. Understanding Evil .....  3
[Same course as Religious Studies 411]
Humanities 412. Science and the Humanities ..... 3
* Humanities 413. Theory in the Humanities. ..... 3
Italian 301. Advanced Oral and Written Composition .....  3
Italian 305A. Italian Literature .....  3
Italian 305B. Italian Literature .....  3
Italian 421. Italian Civilization ..... 3
Italian 424. Italian Cinema .....  3
*^ Italian 426. Italian American Culture .....  3
Japanese 311. Third Year Japanese I .....  3
Japanese 312. Third Year Japanese Il. ..... 3
Japanese 321. Advanced Japanese Discourse .....  3
Japanese 322. Advanced Conversation Through Media ..... 3
^ Japanese 332. Narratives of Japanese Popular Culture. .....  3
^ Japanese 380. Japanese Culture ..... 3
[Same course as Humanities 380]
Korean 301. Advanced Korean I ..... 3
Korean 302. Advanced Korean I .....  3
*^ Korean 321. Korean Civilization .....  3
[Same course as Asian Studies 321]
^ Korean 430. Contemporary Korean Culture Through Media .... 3[Same course as Asian Studies 430]
${ }^{\wedge}$ Latin American Studies 306.
Portuguese and Brazilian Cinema and Culture. ..... 3
[Same course as Portuguese 306]
* Latin American Studies 307. Brazilian Music and Culture. ..... 3
[Same course as Portuguese 307]
** Latin American Studies 310. Mexican and Chicano Music .....  3
[Same course as Chicana and Chicano Studies 310]
* Latin American Studies 370. History of Mexico
From Independence to Early Twentieth Century ..... 3
* Latin American Studies 380.US/Mexico Borderlands Folklore 3
[Same course as Chicana and Chicano Studies 380]
* Latin American Studies 400. Mexican Images in Film ..... 3
[Same course as Chicana and Chicano Studies 400]* Latin American Studies 415.Pre-Contact and Colonial Latin America ................................... 3[Same course as History 415]* Latin American Studies 420. Latin America Through Film ......... 3
* Latin American Studies 450
Study Abroad in Latin American Studies ..... 3
[Maximum GE credit 3 units]
Lesbian, Gay, Bisexual, and Transgender Studies 322.LGBT History and Culture. 3
[Same course as Humanities 322]
* Music 345. World Music in Contemporary Life ..... 3
Music 351. Music and Culture ..... 3
[Maximum GE credit 3 units]
Persian 301. Advanced Persian ..... 4
Persian 302. Advanced Persian II ..... 4
Philosophy 310. Philosophy and Human Nature. ..... 3
* Philosophy 312. Women and Philosophy ..... 3
Philosophy 315. Philosophy and Literature ..... 3
* Philosophy 328. Philosophy, Racism, and Justice ..... 3
Philosophy 329. Social Ethics ..... 3
Philosophy 330. Biomedical Ethics ..... 3
Philosophy 332. Environmental Ethics ..... 3
[Same course as Sustainability 332]
Philosophy 335. Philosophy of Business Ethics ..... 3
Philosophy 340. Morality of War and Peace ..... 3
Philosophy 341. Logic and the Law . ..... 3
Philosophy 342. Morality and the Law ..... 3
Philosophy 344. Global Justice ..... 3
* Philosophy 351. Chinese Philosophy ..... 3
[Same course as Asian Studies 351]
* Philosophy 353. Buddhist Philosophy ..... 3
^ Portuguese 306. Portuguese and Brazilian Cinema and Culture. ..... 3
[Same course as Latin American Studies 306]
*^ Portuguese 307. Brazilian Music and Culture ..... 3
[Same course as Latin American Studies 307]
Professional Studies and Fine Arts 320
Creativity and Communication in the Arts .....  3
Religious Studies 301. Hebrew Bible ..... 3
Religious Studies 305. The New Testament ..... 3
* Religious Studies 310. The Qur'an ..... 3
* Religious Studies 315. Yoga: Theory and Practice ..... 3
Religious Studies 320. Judaism. ..... 3
Religious Studies 325. Christianity ..... 3
* Religious Studies 328. Islam ..... 3
* Religious Studies 330. Abrahamic Faiths: Shared Stories. .....  3
* Religious Studies 337. Asian Religions in America ..... 3
* Religious Studies 338. Buddhism. ..... 3
* Religious Studies 339. Religions of India. ..... 3
* Religious Studies 341
Zen and the Way of Japanese Religions ..... 3
* Religious Studies 345. Religions of East Asia ..... 3
Religious Studies 350. Experiencing the Sacred ..... 3
* Religious Studies 352. Jainism ..... 3
Religious Studies 353. Religion and Psychology ..... 3
Religious Studies 356. Hip Hop and Religion .....  3
* Religious Studies 357. Sikhism. ..... 3
Religious Studies 363. Religion and the Sciences ..... 3
Religious Studies 364. Religion and Film ..... 3
* Religious Studies 370. Goddess Studies. ..... 3
* Religious Studies 373. Women and the Bible ..... 3
Religious Studies 376. Nature, Spirituality, Ecology ..... 3
Religious Studies 379. Religious Violence and Nonviolence ...
Religious Studies 380. Atheism, Humanism, and Secularism... 3
* Religious Studies 382. California Religion and Spirituality. ..... 3
Religious Studies 395. New Religions ..... 3
Religious Studies 405. Faith and Hope ..... 3
[Same course as Humanities 405]
Religious Studies 406. God, Gold, and GloryReligion and Colonial Encounter in the Americas ...................... 33
*Cultural diversity course
${ }^{\wedge}$ Taught in English.
\#Taught bilingually.
${ }^{2}$ Ethnic studies course.
* Religious Studies 411. Understanding Evil ..... 3
[Same course as Humanities 411]
* Religious Studies 424
The Supernatural in Cross-Cultural Perspective ..... 3
[Same course as Anthropology 424]
* Religious Studies 458. Asian Traditions ..... 3
[Same course as Asian Studies 458]* Religious Studies 470. American Indian Spiritualityand Epistemologies..3
[Same course as American Indian Studies 470]Russian 301. Advanced Grammar and Composition. 3
$\wedge$ Russian 305A. Heroes and Villains: Russian Literature of theNineteenth Century..3
${ }^{\wedge}$ Russian 305B. Russian Literature of the Twentieth Century .....  3
${ }^{\wedge}$ Russian 310. Russian and East European Cinema .....  3
Russian 430. Russian Civilization .....  3
*^ Russian 435. Russian and East European Jewish Culture. ..... 3
Spanish 340. Spanish Civilization .....  3
Spanish 341. Spanish American Civilization ..... 3
* Spanish 342. Mexican Civilization. ..... 3
* Spanish 461. Spanish in the United States ..... 3
Sustainability 332. Environmental Ethics.. ..... 3
[Same course as Philosophy 332]
Television, Film and New Media 363.International Cinema.. 3
[Maximum GE credit 3 units]
Television, Film and New Media 430.History of Prime-Time Television..3
Theatre 460A. History of the Theatre ..... 3
Theatre 460B. History of the Theatre ..... 3
* Theatre 465. Theatre of Diversity ..... 3
* Women's Studies 336.
Women of Color in the United States ..... 3
* Women's Studies 340. History of Women and Sexuality in Modern Europe .....  3
* Women's Studies 352. Women in Literature ..... 3
Women's Studies 355.Feminist Approaches to Popular Culture .3
* Women's Studies 360. Women's Sexuality and the Body. ..... 3
*Cultural diversity course
$\wedge^{\wedge}$ Taught in English.


## X. Ethnic Studies Graduation Requirement

Students must complete a three-unit ethnic studies course. This requirement is separate from cultural diversity. Lower division courses that also fulfill I. Communication and Critical Thinking (CSU Area A - English Language Communication and Critical Thinking) may not be used to satisfy this requirement. Ethnic studies courses are identified throughout the catalog with an ES designation. Ethnic studies courses focus on the interdisciplinary and comparative study of ethnicity, race, and racialization. Courses meeting this requirement place strong emphasis on groups whose socio-historical experience of land and labor were critical to the building of the United States: African Americans, Asian Americans, Chicanos/Latinos, and Native Americans. An analysis of empire, migrations, nation-building, power, and the intersections of class, culture, gender, race, and sexuality are critical components in these courses. For a course to meet the ethnic studies requirement it must be taken from the approved list of courses in Africana Studies, American Indian Studies, the Center for Asian and Pacific Studies, Chicana and Chicano Studies, or a cross-listed equivalent. It may also satisfy General Education, American Institutions, preparation for the major, and major, where applicable. Students seeking a second bachelor's degree in nursing are exempt from this requirement with their first baccalaureate degree received from a college/university accredited by a regional accrediting association.

Goals for courses meeting the ethnic studies requirement:

- Goal 1: Define core concepts that are foundational to the field of ethnic studies to include colonialism, equity, ethnicity and culture, Eurocentrism, indigeneity, race, racialization, racism, and white supremacy.
- Goal 2: Examine from an interdisciplinary perspective, the general history, culture, and/or contemporary lived experiences of at least one of four groups to include African Americans, Asian Americans, Chicana/o/xs-Latinxs, and Native Americans.
- Goal 3: Explain how African American, Asian American, Chi-cano/a/x-Latinxs, or Native American communities use different forms of resistance and cultural affirmation for community engagement and the advancement of anti-racism and decolonization.
- Goal 4: Analyze how race and racism intersects with class, ethnicity, gender, legal status, and/or sexuality to shape life chances and social relations.
- Goal 5: Engage social and academic practices originating in African American, Asian American, Chicano/a/x-Latinx, or Native American communities to work towards building a more anti-racist, decolonial, equitable, and inclusive society beyond the classroom.


## Ethnic Studies [ES] Courses

Africana Studies 101
Africana Studies 102
Africana Studies 170A [AI]
Africana Studies 170B [AI]
Africana Studies 240
Africana Studies 260
Africana Studies 327
Africana Studies 331
Africana Studies 332
Africana Studies 363/Linguistics 363
Africana Studies 385

## Africana Studies 422

Africana Studies 423
Africana Studies 466
Africana Studies 470
Africana Studies 471
Africana Studies 472
Africana Studies 476
American Indian Studies 110
American Indian Studies 140 [AI]
American Indian Studies 141 [AI]
American Indian Studies 210
American Indian Studies 300
American Indian Studies 320
American Indian Studies 331/Political Science 331
American Indian Studies 370/
Hospitality and Tourism Management 370
American Indian Studies 420
American Indian Studies 430
American Indian Studies 435
American Indian Studies 440
American Indian Studies 451/Anthropology 451
American Indian Studies 460/Anthropology 460/ Linguistics 460
American Indian Studies 480
American Indian Studies 485
Asian Studies 422/History 422
Asian Studies 460/Filipino 460
Chicana and Chicano Studies 100
Chicana and Chicano Studies 110
Chicana and Chicano Studies 120A [AI]
Chicana and Chicano Studies 120B [AI]
Chicana and Chicano Studies 141A [AI]
Chicana and Chicano Studies 141B [AI]
Chicana and Chicano Studies 150

Chicana and Chicano Studies 275
Chicana and Chicano Studies 280
Chicana and Chicano Studies 301
Chicana and Chicano Studies 303
Chicana and Chicano Studies 306
Chicana and Chicano Studies 310/
Latin American Studies 310
Chicana and Chicano Studies 320
Chicana and Chicano Studies 340A
Chicana and Chicano Studies 340B
Chicana and Chicano Studies 350A
Chicana and Chicano Studies 350B
Chicana and Chicano Studies 355/
Latin American Studies 355
Chicana and Chicano Studies 375
Chicana and Chicano Studies 376
Chicana and Chicano Studies 380/
Latin American Studies 380
Chicana and Chicano Studies 400/
Latin American Studies 400
Chicana and Chicano Studies 405
Chicana and Chicano Studies 450
Chicana and Chicano Studies 480

## Application for Graduation

Graduation is not automatic upon the completion of requirements. Students who intend to graduate must take the initiative. Students should apply to graduate for the term they anticipate completing all degree requirements. Enrolled students apply using the SDSU WebPortal at http://www.sdsu.edu/portal, selecting the "Apply to Graduate" menu option, and submitting the application and one-time nonrefundable $\$ 100.00$ filing fee prior to the deadline. Application deadlines are published each year in the academic calendar and on the Apply to Graduate website at www.sdsu.edu/applytograduate. A one-time nonrefundable application fee of $\$ 100.00$ is required. Students seeking a second bachelor's degree in nursing must submit an undergraduate application for graduation.

All requirements must be completed by the graduation date. After the degree is granted, changes cannot be made to the undergraduate record. Candidates for graduation are not eligible to register for terms subsequent to the graduation date unless an application for readmission as a postbaccalaureate student has been filed with Graduate Admissions.

Students not completing all degree requirements by the end of the term for which they applied to graduate will need to reapply for graduation for a future term during the published filing period. Candidates who wish to change their projected graduation date between May and August may do so through the SDSU WebPortal at http://www.sdsu.edu/portal by clicking on the "Apply to Graduate" menu option and by submitting a Graduation Term Transfer application. Changes between December and May or August graduation dates require a new graduation application.

Graduation requirements will be determined by the continuous enrollment regulations. A student not in a period of continuous enrollment at the time of filing for a bachelor's degree must meet the catalog requirements in effect at the time of filing. Continuous enrollment is defined here as attendance in at least one semester or two quarters within a calendar year. See the Election of Regulations for Graduation section below for complete regulations.

Time Limit on Completion of Requirements for the Major. As authorized by Title 5, California Code of Regulations, Section 40401, departments may require that specific academic requirements be met within seven years of granting an undergraduate degree. Such requirements will consist of advanced courses and examinations in areas of knowledge changing so rapidly that information may be obsolete after seven years. In those cases in which a student is required to repeat a course taken more than seven years previously, only the last grade will be used in computation of grade point averages.

NOTE: San Diego State University does not backdate degrees. The semester in which all your requirements are completed is the semester in which your degree will be posted to your academic record as long as you have an active application for graduation on file.

## Election of Regulations for Graduation

An undergraduate student remaining in attendance in regular session at any California State University campus, any California community college, or any combination of California community colleges and campuses of The California State University may, for purposes of meeting graduation requirements, elect to meet the requirements in effect at San Diego State University either at the time the student began such attendance or at the time of entrance to the campus or at the time of graduation. Substitutions for discontinued courses may be authorized or required by the proper authorities.
"Attendance" is defined here as attendance in at least one semester or two quarters within a calendar year. Absence due to an approved educational leave or for attendance at another accredited institution of higher learning shall not be considered an interruption in attendance if the absence does not exceed two years. When students change or declare their majors, they must adopt the requirements of the major and any minors in effect at that time.

## Commencement

Commencement exercises are held once a year at the end of the spring semester for undergraduate and graduate students who graduated fall of the previous year and candidates for graduation in spring and summer of the current year. The president of the university, by the authority of the trustees and on recommendation of the faculty, awards the degrees. Details regarding the exercises are mailed to prospective participants in March and are made available on the Commencement website at http://www. sdsu.edu/commencement.

## in this section:

»Summary of Curricula Offered
» Major and Credential Codes
» Nondegree Curricula
» Course Information and Programs
» Courses and Curricula by Department

## Summary of Curricula Offered

## Types of Curricula Offered

San Diego State University offers the following types of curricula:

Undergraduate Curricula. Undergraduate curricula provide the following opportunities for study:

1. Liberal arts and sciences: Curricula in the academic major fields, leading to the Bachelor of Arts degree in liberal arts and sciences.
2. Applied arts and sciences: Curricula in major fields leading to the Bachelor of Science, Bachelor of Arts, Bachelor of Fine Arts in Dance, or Bachelor of Music degree in applied arts and sciences.
3. Professional curricula: The Fowler College of Business offers the Bachelor of Science degree in business administration with majors in seven fields; the College of Engineering offers the Bachelor of Science degree in engineering with majors in six fields; and the College of Education offers curricula in teacher education leading to graduate credentials at all levels of public school teaching.

The School of Speech, Language, and Hearing Sciences offers curricula leading to clinical certification and graduate credentials in speech pathology, audiology, and speech, Ianguage, and hearing sciences.

The School of Nursing offers the Bachelor of Science degree and the Master of Science degree in Nursing (areas of concentration are advanced practice nursing of adults and the elderly and nursing leadership in health care systems) and offers a curriculum leading to registered nurse licensure, public health nurse credential, health services credential (school nurse services), and nurse educator.
4. Preprofessional and nondegree curricula: Programs are offered in predental, prelegal, premedical, and preveterinary leading to transfer to professional schools. Air Force, Army, and Naval ROTC programs are also available.
Graduate Curricula. The Division of Graduate Affairs offers curricula in the various colleges and departments leading to the Master of Arts and Master of Science degrees in a wide variety of fields, the Master of Arts in Teaching, the Master of Business Administration, the Master of Business Administration and Juris Doctor, the Master of City Planning, the Master of Engineering, the Master of Fine Arts in Art, the Master of Fine Arts in Creative Writing, the Master of Fine Arts in Film and Television Production, the Master of Fine Arts in Theatre Arts, the Master of Music, the Master of Public Administration, the Master of Public Health, the Master of Social Work, the Master of Social Work and Juris Doctor, and the Master of Social Work and Master of Public Health.

Also offered are the Educational Specialist in school psychology, the Professional Doctorate in audiology, the Doctor of Education, the Doctor of Education in educational leadership, the Doctor of Physical Therapy, and the Doctor of Philosophy in biology (cell and molecular), chemistry, clinical psychology, computational science, ecology, education, engineering sciences (bioengineering), engineering sciences (electrical and computer engineering), engineering sciences (mechanical and aerospace engineering), engineering sciences (structural engineering), evolutionary biology, geography, geophysics, interdisciplinary research on substance use, language and communicative disorders, mathematics and science education, and public health.

## Degrees

San Diego State University offers the following degrees:
Bachelor of Arts
Bachelor of Fine Arts (Dance)
Bachelor of Music
Bachelor of Science
Master of Arts
Master of Arts in Teaching
Master of Science
Master of Business Administration
Master of Business Administration and Juris Doctor
Master of City Planning
Master of Engineering
Master of Fine Arts (Art, Creative Writing,
Film and Television Production, Theatre Arts)
Master of Music
Master of Public Administration
Master of Public Health
Master of Social Work
Master of Social Work and Juris Doctor
Master of Social Work and Master of Public Health
Educational Specialist in School Psychology
Doctor of Audiology
Doctor of Education
Doctor of Philosophy
Doctor of Physical Therapy

| Types of Degrees Offered by Major | Applied Arts and Sciences |  | Liberal Arts and Sciences | Graduate Curricula |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Majors | B.A., B.F.A. | B.S. | B.A. | Masters (Arts) | Masters (Sciences) | Au.D., DPT, Ed.D., Ph.D. |
| Accountancy | - | - | - | - | M.S. | - |
| \# Accounting | - | B.S. | - | - | - | - |
| Aerospace engineering | - | B.S. | - | - | M.S. | - |
| Africana studies | - | - | B.A. | - | - | - |
| American Indian studies | - | - | B.A. | - | - | - |
| Anthropology | - | - | B.A. | M. A. | - | - |
| Applied mathematics | - | - | - | - | M.S. | - |
| Art | B.A. | - | B.A. | M.A., M.F.A. | - | - |
| Asian studies | - | - | B.A. | M. A. | - | - |
| Astronomy | - | B.S. | B.A. | - | M.S. | - |
| Athletic training | - | B.S. | - | - | - | - |
| Audiology | - | - | - | - | - | Au.D. |
| Big data analytics | - | - | - | - | M.S. |  |
| Bioengineering | - | - | - | - | M.S. | Ph.D. |
| Bioinformatics and medical informatics | - | - | - | - | M.S. | - |
| Biology | - | B.S. | B.A. | M.A. | M.S. | Ph.D. |
| \# Business administration | - | B.S. | - | M.B.A. | M.S. | - |
| Business administration/juris doctor | - | - | - | M.B.A./J.D. | - | - |
| Business administration/Latin American studies | - | - | - | M.B.A./M.A. | - | - |
| Chemical physics | - | B.S. | - | - | - | - |
| Chemistry | B.A. | B.S. | B.A. | M.A. | M.S. | Ph.D. |
| Chicana and Chicano studies | - | - | B.A. | M.A. | - | - |
| Child development | - | B.S. | - | - | M.S. | - |
| City planning | - | - | - | - | M.C.P. | - |
| Civil engineering | - | B.S. | - | - | M.S. | - |
| Classics | - | - | B.A. | - | - | - |
| Clinical psychology | - | - | - | - | - | Ph.D. |
| Communication | B.A. | - | B.A. | M.A. | - | - |
| Comparative international studies | - | - | B.A. | - | - | - |
| Comparative literature | - | - | B.A. | - | - | - |
| Computational science | - | - | - | - | M.S. | Ph.D. |
| Computer engineering | - | B.S. | - | - | - | - |
| Computer science | - | B.S. | - | - | M.S. | - |
| Construction engineering | - | B.S. | - | - | - | - |
| Counseling | - | - | - | - | M.S. | - |
| Creative writing | - | - | - | M.F.A. | - | - |
| Criminal justice | - | B.S. | - | - | - | - |
| Criminal justice and criminology | - | - | - | - | M.S. | - |
| Cybersecurity management | - | - | - | - | M.S. | - |
| Dance | B.F.A. | - | B.A. | - | - | - |
| Ecology | - | - | - | - | - | Ph.D. |
| Economics | - | - | B.A. | M. A. | - | - |
| Education | - | - | - | M.A., M.A.T. | - | Ph.D. |
| Educational leadership | - | - | - | - | - | Ed.D. |
| School psychology | - | - | - | - | Ed.S. | - |
| Electrical and computer engineering | - | - | - | - | - | Ph.D. |
| Electrical engineering | - | B.S. | - | - | M.S. | - |
| Engineering | - | - | - | - | M.Eng. |  |
| English | B.A. | - | B.A. | M.A. | - | - |
| Environmental engineering | - | B.S. | - | - | - | - |
| Environmental sciences | - | B.S. | - | - | - | - |
| Epidemiology |  |  |  |  | M.S. |  |
| European studies | - | - | B.A. | - | - | - |
| Evolutionary biology | - | - | - | - | - | Ph.D. |
| Exercise physiology | - | - | - | - | M.S. | - |
| Exercise physiology and nutritional science | - | - | - | - | M.S./M.S. | - |
| Film and television production | - | - | - | M.F.A. | - | - |
| \# Finance | - | B.S. | - | - | - | - |
| \# Financial services | - | B.S. | - | - | - | - |
| Foods and nutrition | - | B.S. | - | - | - | - |
| French | - | - | B.A. | M. A. | - | - |
| Geography | B.A. | B.S. | B.A. | M. A. | M.S. | Ph.D. |
| Geological sciences | B.A. | B.S. | - | - | M.S. | - |
| Geophysics | - | - | - | - | - | Ph.D. |
| German | - | - | B.A. | - | - | - |
| Gerontology | - | - | B.A. | - | M.S. | - |
| Global Business Development |  |  |  |  | M.S. |  |
| Health communication | - | B.S. | - | - | - | - |
| History | - | - | B.A. | M.A. | - | - |
| Homeland security | - | - | - | - | M.S. | - |
| Hospitality and tourism management |  | B.S. | - | - | M.S. | - |



[^7]
## Emphases and <br> Concentrations

An emphasis or concentration is defined as an aggregate of courses within a degree major designed to give a student specialized knowledge, competence, or skill. Completion of an emphasis or concentration is noted on the student's transcript and diploma for undergraduate students.

## Baccalaureate Emphases

Art (B.A., Liberal Arts and Sciences)
Emphases:
Art History
Studio Arts
Art (B.A., Applied Arts and Sciences)
Emphases:
Applied Design
Graphic Design
Interior Architecture
Multimedia
Painting and Printmaking
Sculpture
Asian Studies
(B.A., Liberal Arts and Sciences)

Emphasis:
Chinese Studies and Language
Biology (B.S., Applied Arts and Sciences)
Emphases:
Cellular and Molecular Biology
Ecology
Evolutionary Biology
Marine Biology
Zoology
Chemistry (B.A., Applied Arts and Sciences)
Emphasis:
Integrated Teacher Education Program (ITEP-SS)
Chemistry (B.S., Applied Arts and Sciences)
Emphasis:
Biochemistry
Classics (B.A., Liberal Arts and Sciences) Emphases:

Classical Humanities
Classical Language Classical Languages with Honors
Communication
(B.A., Liberal Arts and Sciences)

Economics (B.A., Liberal Arts and Sciences)
Emphases:
International Economics
Public Policy
Geography (B.A., Applied Arts and Sciences)
Emphasis:
General Geography
Geography (B.A., Liberal Arts and Sciences)
Emphases:
Environment, Sustainability, and Policy
Geographic Infomation Science and Technology
Human Geography and Global Studies
Geography (B.S., Applied Arts and Sciences)
Emphases:
Geographic Information Science and Technology
Water, Climate, and Ecosystems

## Geological Sciences

(B.S., Applied Arts and Sciences)

Emphases:
General Geology
Engineering Geology
Environmental Geosciences
Geophysics
Hydrogeology
Paleontology

German (B.A., Liberal Arts and Sciences)
Emphasis:
German Studies
Hospitality and Tourism Management
(B.S., Applied Arts and Sciences)

Emphases:
Hotel Operations and Management
Meetings and Events Operations and Management
Restaurant Operations and Management Tribal Gaming Operations and Management
Humanities (B.A., Liberal Arts and Sciences)
Emphasis:
European Humanities
International Business
(B.A., Liberal Arts and Sciences)

Emphases in language:
Arabic
Chinese
English
French
German
Italian
Japanese
Korean
Portuguese
Russian
Spanish
Emphases in regional/cultural studies:
Africa/French
Asia/Chinese
Asia/Japanese
Asia/Korean
Latin America/Portuguese
Latin America/Spanish
Middle East and North Africa/Arabic
North America/English
North America/French
Central Europe/Russian
Western Europe/French
Western Europe/German
Western Europe/Italian
Western Europe/Portuguese
Western Europe/Spanish
Journalism (B.A., Liberal Arts and Sciences)
Emphases:
Advertising
Media Studies
Public Relations
Kinesiology (B.S., Applied Arts and Sciences)
Emphases:
Exercise Science Generalist
Fitness Specialist
Prephysical Therapy
Liberal Studies
(B.A., Applied Arts and Sciences)

Emphases:
Education-Generalist
Elementary Education
Integrated Teacher Education Program (ITEP-SS)
Mathematics
Science
Mathematics
(B.A., Applied Arts and Sciences)

Emphasis:
Integrated Teacher Education Program (ITEP-SS)
Mathematics
(B.S., Applied Arts and Sciences)

Emphases:
Applied Mathematics
Computational Science
Mathematics Education
Science

## Mechanical Engineering

(B.S., Applied Arts and Sciences)

Emphasis:
Bioengineering
Microbiology
(B.S., Applied Arts and Sciences)

Emphasis:
Clinical Laboratory Science
Psychology (B.A., Liberal Arts and Sciences)
Emphasis:
Industrial and Organizational Psychology

## Public Administration

(B.A., Applied Arts and Sciences)

Emphasis:
City Planning
Recreation Administration
(B.S., Applied Arts and Sciences)

Emphases:
Outdoor Resource Management
Recreation Systems Management
Sustainable Tourism Management
Social Science
(B.A., Liberal Arts and Sciences)

Emphasis:
Integrated Teacher Education Program (ITEP-SS)
Statistics (B.S., Applied Arts and Sciences)
Emphases:
Actuarial Science
Data Science
Television, Film and New Media
(B.S., Applied Arts and Sciences)

Emphases:
Critical Studies
Production

## Theatre Arts

(B.A., Applied Arts and Sciences)

Emphases:
Design and Technology
Design for Television and Film
Performance
Youth Theatre

## Graduate Concentrations

Applied Mathematics (M.S.)
Concentrations:
Dynamical Systems
Mathematical Theory of Communication Systems
Art (M.A.)
Concentrations: Art History Studio Arts
Bioinformatics and Medical Informatics (M.S.)

Concentration: Professional Science Master
Biology (M.A. or M.S.)
Concentrations: Ecology
Evolutionary Biology
Molecular Biology
Physiology
Business Administration (M.S.)
Concentrations:
Entrepreneurship
Finance
Financial and Tax Planning
Information Systems
International Business
Management
Marketing
Real Estate
Supply Chain Management
Taxation

Child Development (M.S.)
Concentration:
Early Childhood Mental Health
Civil Engineering (M.S.)
Concentration:
Environmental Engineering
Computational Science
Concentrations (M.S.):
Data Science
Professional Applications
Counseling (M.S.)
Concentrations:
Marriage and Family Therapy
Multicultural Community Counseling Community-Based Block
School Counseling
School Psychology
Education
Concentrations (M.A.):
Counseling
Dual Language and English Learner Education
Educational Leadership
Elementary Curriculum and Instruction
Mathematics Education
Reading Education
Secondary Curriculum and Instruction Special Education

## Geography

Concentrations (M.S.):
Geographic Information Science Watershed Science
Nursing (M.S.)
Concentrations:
Advanced Practice Nursing of Adults and the Elderly
Nursing Education
Nursing Leadership in Health Care Systems
Psychology (M.S.)
Concentrations:
Applied Psychology: Program Evaluation
Applied Psychology: Industrial and Organizational Psychology
Clinical Psychology (included within the Ph.D. program; not available separately)
Public Administration (M.P.A.)
Concentrations:
City Planning
Criminal Justice Administration
Public Health
Concentrations (M.P.H.):
Biometry
Environmental Health
Epidemiology
Health Management and Policy
Health Promotion and Behavioral Science
Concentration (M.S.):
Environmental Health Sciences
Concentrations (Ph.D.):
Epidemiology
Global Health
Health Behavior
Rehabilitation Counseling (M.S.)
Concentration:
Clinical Rehabilitation and Clinical Mental Health Counseling
Speech, Language, and Hearing Sciences (M.A.)

Concentrations:
Communicative Sciences
Speech-Language Pathology
Statistics (M.S.)
Concentration: Biostatistics

Teaching (M.A.T.)
Concentrations:
Elementary Education
Language Arts Education (summer only)
Mathematics Education
Reading/Language Arts Education
Science Education
Secondary Education
Theatre Arts (M.F.A.)
Concentrations:
Acting
Design and Technology
Musical Theatre

## Credentials Offered

## Added Authorizations

Bilingual, with an emphasis in biliteracy for K-12
Early Childhood Special Education Reading and Literacy

## Teaching Credentials

Multiple subject; internship
Multiple subject bilingual 2042
Multiple subject and special education bilingual (Spanish)
Single subject; internship
Single subject bilingual 2042

## Specialist Credentials

BCLAD
Reading and Literacy Leadership
Special Education:
Early Childhood Special Education; mild moderate disabilities and moderate to severe disabilities credential Early Childhood Special Education, preliminary and clear; internship credential
Mild/Moderate Disabilities, preliminary and clear; internship credential Moderate/Severe Disabilities, preliminary and clear; internship credential
Service Credentials
Administrative; internship
Pupil Personnel:
Child Welfare and Attendance
School Counseling
School Nurse
School Psychology
School Social Work
School Nurse Services
Speech Language Pathology

## Minors for the

Bachelor's Degree
Accounting
Air Force Leadership Studies
African Studies
Africana Studies
American Indian Studies
Anthropology
Art
Art History
Asian Studies
Astronomy
Biology
Business Administration
Chemistry
Chicana and Chicano Studies
Child Development
Children's Literature
Chinese
Chinese Studies
Classics
Communication
Comparative Literature
Computer Science

Counseling and Social Change
Creative Editing and Publishing
Creative Writing
Cultural Proficiency
Dance
Digital and Social Media Studies
Economics
Energy Studies
Engineering
English
Entrepreneurship
European Studies
Finance
French
Geography
Geological Sciences
German
Gerontology
History
Honors in Interdisciplinary Studies
Humanities
Information Systems
International Security and
Conflict Resolution
International Studies, PSFA
Islamic and Arabic Studies
Italian
Japanese
Japan Studies
Judaic Studies
Latin American Studies
Leadership Development
Learning Design and Technology
Lesbian, Gay, Bisexual, Transgender,
Queer, and Plus (LGBTQ+) Studies
Linguistics
Management
Marketing
Mathematics
Military Science
Music
Naval Science
Oceanography
Philosophy
Physics
Political Science
Portuguese and Brazilian Studies
PSFA International Studies
Psychology
Public Administration
Public Health
Real Estate
Recreation
Religious Studies
Rhetoric and Writing Studies
Russian
Science, Technology, and Society Studies
Social Work
Sociology
Somatic Studies
Spanish
Statistics
Sustainability
Teaching English as a Second or
Foreign Language (TESL/TEFL)
Television, Film and New Media
Text Analytics
Theatre Arts
United States-Mexican Border Studies
Women's Studies

## Special Curricula

## Preprofessional Curricula

Predental
Prelegal
Premedical
Preveterinary

## Military Curricula

Aerospace Studies (AFROTC)
Military Science (ROTC)
Naval Science (NROTC)

## Certificate Programs

(nondegree)
Applied Gerontology
Artist Diploma
Behavior Analysis
Bilingual (Spanish) Special Education
Bilingual Speech-Language Pathology
Biomedical Quality Systems
Biotechnology
Brazilian Studies
Business Administration (SDSU Imperial Valley Only)
Children's/Adolescent Literature
Children's Literature
Cognitive Disabilities
Communication
Communication Systems
Community College Teaching
Computational Linguistics
Creative Editing and Publishing
Creative Writing
Data Analytics
Developing Gifted Potential
Distance Education
Dual Language for Academic Literacy
Early Care and Education
Early Childhood Transdisciplinary
Education and Mental Health
English Language Development for Academic Literacy
Entertainment Management
Environmental Studies
Executive Financial Planner
Family Life Education
Geographic Information Science
Global Religious Literacy
Health Communication
Human Rights
Indian Religions, Cultures, and Traditions Industrial/Organizational Psychology
Institutional Research, Planning,
and Assessment
Instructional Design
Instructional Technology
Intellectual Property and Regulatory Affairs
International Media
Korean Studies
Lesbian, Gay, Bisexual, Transgender,
Queer, and Plus (LGBTQ+) Studies
Meeting and Event Management
Performance
Personal Financial Planning
Pop Culture
Preventive Medicine Residency
Professional Computational Science
Professional Writing
Psychiatric Rehabilitation
Public Administration (SDSU Imperial Valley Only)
Public Health
Public Law

Regulatory Affairs
Rehabilitation Administration
Rehabilitation Counseling
Rehabilitation Technology
Residency Training in Radiation Therapy Physics
Restorative Justice Practice and Trauma-Informed Care
Single Subject Mathematics
Social Work Administration
Spanish for the Professions
Spanish Translation and Interpretation Studies
Supported Employment and Transition Specialist
Taxation
Teaching English as a Second or Foreign Language (TESL/TEFL)
Teaching of Writing
Text Analytics
United States-Mexico Border Studies
Web and Mobile
Applications Development
Women's Studies
Workforce Education and Lifelong Learning
The following non-academic credit programs are available through SDSU Global Campus only.

Business of Craft Beer
Business of Wine
Civil Sitework Construction Online
Construction Estimating Online
Construction Practices Online
Construction Project Management Online
Construction Supervision Online
Contract Management
Cultural Competence for Educators
Grant Writing
Health Care (Clinical Medical Assistant, EKG Technician, Pharmacy Technician Training, and Test Preparation)
Human Resource Management
Lean Enterprise
Lean Six Sigma
Management and Leadership
Marketing
Meeting and Event Planning
Nutrition for Optimal Health and Wellness
Occupational Health and Safety Management
Project Management
Teaching English as a Second Language

# Major and Credential Codes 

MAJOR CODE KEY:

$\mathrm{U}=$ Undergraduate<br>G = Graduate

$+=$ Emphasis within another bachelor's degree $\Phi=$ Concentration within another master's or Ph.D. degree
\# = Specialization within another bachelor's degree $\wedge=$ Specialization within another master's degree

| Major Major Code | Major Major Code |
| :---: | :---: |
| Accountancy....................................05021......... | Bioengineering .................................09051...U,G |
| + Accounting.............................................05021.......U | Civil Engineering...............................09081...U,G |
| Africana Studies.................................. $22111 . . . . . . . \cup$ | Computer Engineering..................... $09094 . . . . . . . U$ |
| American Indian Studies ........................ $22121 . . . . . . . U$ | Construction Engineering.................... $09254 . . . . . . . . U$ |
| Anthropology.........................................22021...U,G | Electrical and Computer |
| Applied Mathematics ...........................17031.......G | Engineering....................................09095.......G |
| Art............................................................10021...U,G | Electrical Engineering...........................09091...U,G |
| + ¢ Art History .......................................10031...U,G | \$ Environmental Engineering...................09221...U,G |
| + Graphic Design .......................................10091......U | Mechanical and Aerospace/ |
| + Interior Architecture..............................02031......U | Engineering...................................19020.......G |
| + Multimedia ........................................06991......U | Mechanical Engineering.......................09101...U,G |
| Art - MFA ............................................10022.......G | Structural Engineering.........................09084.......G |
| Asian Studies....................................03011...U,G | English....................................................15011..U, ${ }^{\text {. }}$ |
| + Chinese Studies and Language ..... $03011 . . . . . . \cup$ | ¢ Entrepreneurship................................05997.......G |
| Astronomy...............................................19111...U,G | Environmental Sciences...................... 49011......U |
| Athletic Training..................................08375.......U | Epidemiology.........................................04154........ |
| Audiology ...............................................12202.......G | European Studies................................... $03101 . . . . . . . U$ |
| Big Data Analytics ................................05071.......G | Evolutionary Biology..........................04016........ |
| Bioinformatics and Medical | Exercise Physiology............................ 08355.........G |
| Informatics...................................07994.......... | Exercise Physiology and Nutritional |
| Biology .....................................................04011...U,G | Science (concurrent program) ....... 08356 ........G |
| + Business Administration.........................05011...U,G | Film and Television |
| Business Administration and Juris Doctor (concurrent program) $\qquad$ 05011 ....G |  |
| Business Administration and | + $¢$ Financial and Tax Planning.................. 05043 .......G |
| Latin American Studies | Foods and Nutrition ................................13061.......U |
| (concurrent program)........................ $49061 . . . . . . . .6$ | French.....................................................11021...U,G |
| + Chemical Physics...................................19081......U | Geography..........................................22061...U,G |
| Chemistry ...............................................19051...U,G | Geological Sciences.............................19141 ...U,G |
| + Biochemistry......................................19051......U | Geophysics ..........................................19160........G |
| Chicana and Chicano Studies................22131...U,G | German......................................................11031......U |
| Child Development...............................08231..U,G | Gerontology.....................................12043...U,G |
| City Planning......................................02061........ | Global Business Development.............05131......... |
| Classics.................................................15041.......U | Health Communication........................06013.......U |
| Clinical Psychology............................20031........G | Homeland Security..............................22102.......G |
| Communication...................................15061.......U | History .............................................22051..U,G |
| ^ Communication Studies ........................06011........G | Hospitality and Tourism |
| Comparative International Studies.....22997........U | Management....................................05081...U,G |
| Comparative Literature ........................15031.......U | Humanities......................................15991.......U |
| Computational Science ...................... $07992 . . . . . . . \mathrm{G}$ | ¢ Human Resource Management...........05151........G |
| Computer Science.............................07011...U,G | + Information Systems ..........................07021...U,G |
| Counseling.............................................08261.......G | Interdisciplinary Studies........................49993...U,G |
| Creative Writing..................................15071......... | Interdisciplinary Research on |
| Criminal Justice...............................................U | Substance Use.............................. 49075 ........G |
| ¢ Criminal Justice Administration............ $21051 . . . . . . . . \mathrm{G}$ | ¢ International Business............................05131...U,G |
| Criminal Justice and Criminology .......22091........G | International Security and |
| Cybersecurity Management................ 07031........G | Conflict Resolution...........................22103.......U |
| Dance.....................................................10081.......U | Islamic and Arabic Studies ....................15103.......U |
| Dance - BFA........................................ $10082 . . . . . . \cup$ | Japanese.................................................11081.......U |
| Doctor of Physical Therapy ...................12122........G |  |
| \$ Ecology ..................................................04201.......G | + Advertising..........................................06041.......U |
| Economics ......................................22041..U,G | $\wedge$ Mass Communication and |
| Education (Ed.D.)...............................08291........ | Media Studies ......................................06011.......G |
| School Psychology (Ed.S.)................... 20013 ........G | + Media Studies ........................................06021......U |
| Education (MAT)................................... $08292 . . . . . . . . G$ | + Public Relations.................................... $05922 . . . . . . U$ |
| Education...........................................08011.......G | Juris Doctor and Social Work (concurrent program). <br> 21041......G |
| $\pm$ Counseling..........................................08261.......G |  |
| \$ Dual Language and English <br> Learner Education............................. 08994 .......G | Language and Communicative |
| ¢ Educational Leadership..................... 08271.......G | Disorders .......................................... 12201........ |
| ¢ EDL: PreK-12 School Leadership......... 08272 ........G | Language, Culture, and Society .......... $22024 \ldots . . . . .$. Latin American Studies ............................03081...U,G |
| \$ EDL: Community College/ <br> Post-secondary Leadership............ 08273........G | Latin American Studies and Business Administration |
| © Elementary Curriculum and Instruction............................................................ | (concurrent program) $\qquad$ 49061........G |
| ¢ Learning Design and Technology ..... 08992 ......... | Latin American Studies and |
| Mathematics Education K-8.................. 17012 ......... | (concurrent program) $\qquad$ |
| ¢ Reading Education ..............................08301.......G | Latin American Studies and |
| \$ Secondary Curriculum and Instruction.........................................................G | Public Health <br> (concurrent program) $\qquad$ 49062 ... $\qquad$ |
| ¢ Special Education...............................08081........ | Lesbian, Gay, Bisexual, |
| Engineering...........................................09134.......G | Transgender, Queer, |
| Aerospace Engineering.........................09021...U,G | and Plus (LGBTQ+) Studies ............ 22990 .......U |



## Numerical Listing of Major Codes

$\begin{array}{ll}\text { Major Code } & \text { Major } \\ 00000 . . \text { U............ Undeclared }\end{array}$
02031................. Interior Architecture
02061....G........... \& City Planning
03011.....U,G .......... Asian Studies
03011................. + Chinese Studies and Language
03071....U.............. Russian and East European Studies
03081....U,G.......... Latin American Studies
03101.................... European Studies
04011.....U,G.......... Biology
04016....G.............. Evolutionary Biology
04071....G........... \& Systematics Evolutionary Biology (Zoology)
04101.....G............ \$ Physiology
04111.......U,G.......... Microbiology
04154....G.............. Epidemiology
04161................. $\$$ Molecular Biology
04201....G........... $\Phi$ Ecology
05011.....U,G....... + Business Administration
05011.....G............... Business Administration and Juris Doctor (concurrent program)
05016....G........... \& Life Sciences
05021....G.............. Accountancy
05021................ + Accounting

05022 ..G............ \& Taxation
05041....U,G ... + $\ddagger$ Finance
05043...U............ + Financial Services
05043...G........... \& Financial and Tax Planning
05061...U,G... + \& Management

05064 ..G............ $\Phi$ Operations Management
05071....G.............. Big Data Analytics
05081....U,G.......... Hospitality and Tourism Management
05086 ..G.............. Meeting and Event Management
05091....U,G... + ¢ Marketing
05111......U,G ... $+\Phi$ Real Estate
05131..................... Global Business Development
05131.....U,G....... $\ddagger$ International Business
05151.....G........... $\$$ Human Resource Management
05992...U........... + Public Relations
05997...G........... \& Entrepreneurship
06011.................^ Communication Studies
06011.....G.............^ Mass Communication and Media Studies
06013....U.............. Health Communication
06021...U............... Journalism
06021................ + Media Studies
06031....U.............. Television, Film and New Media
06041....U............ + Advertising
06991....U............ + Multimedia
07011......U,G.......... Computer Science

07021 ....U,G....... + Information Systems
07031................... Cybersecurity Management
07992...G.............. Computational Science
07994...G.............. Bioinformatics and Medical Informatics
08011.....G.............. Education
08021....G........... $\$$ Elementary Curriculum, Instruction
08031....G........... $\$$ Secondary Curriculum, Instruction
08081....G............ $\$$ Special Education
08231....U,G.......... Child Development
08261....G.............. Counseling

08271 ....G........... $\Phi$ Educational Leadership
08272...G........... ¢ EDL: PreK-12 School Leadership
08273...G........... \& EDL: Community College/ Postsecondary Leadership
08291....G.............. Education (Ed.D.)
08292...G............... Education (MAT)
08301....G........... $\$$ Reading Education
08351....U,G.......... Kinesiology
08355...G.............. Exercise Physiology
08356...G............... Nutritional Science and Exercise Physiology (concurrent program)
08375...U.............. Athletic Training
08395...U............... Vocational Education
08992...G.............. Learning Design and Technology
08994...G........... \& Dual Language and English Learner Education

Major Code Major
08997...G.............. Mathematics and Science Education
09021....U,G.......... Aerospace Engineering
09051....U,G.......... Bioengineering
09081....U,G.......... Civil Engineering

09084 ..G.............. Structural Engineering
09091....,G.......... Electrical Engineering

09094 ..U.............. Computer Engineering
09095..G.............. Electrical and Computer Engineering
09101.....U,G.......... Mechanical Engineering
09134....G.............. Engineering
09221....U,G....... $\Phi$ Environmental Engineering
09254...U.............. Construction Engineering
10021.....U,G......... Art
10022....G.............. Art - MFA
10031.....U,G ... + \$ Art History
10041.....U,G.......... Music
10051.....U,G.......... Music
10071.....U,G.......... Theatre Arts
10072....G.............. Theatre Arts - MFA
10081.....U............... Dance
10082....U.............. Dance - BFA
10091.....U............ + Graphic Design
10102.....G.............. Film and Television Production - MFA
11021.......U,G.......... French
11031..................... German
11051......U,G.......... Spanish
11061...................... Russian
11081.......U.............. Japanese
12031......U,G.......... Nursing
12032....U.............. Nursing
12043....U,G......... Gerontology
12122......G............. Doctor of Physical Therapy

12141 .......U,G .......... Public Health
12143......G........... $¢$ Health Behavior
12202....G.............. Audiology
12203....G.............. Language and Communicative Disorders
12203....U,G .......... Speech, Language, and Hearing Sciences
12221.....G.............. Rehabilitation Counseling
12251......G............... Medical Physics

12991 .....G.............. Social Work and Public Health (concurrent program)
13061 ..... U.............. Foods and Nutrition
13061 .....G.............. Nutritional Sciences
15011.......U,G.......... English

15013 .....U,G .......... Rhetoric and Writing Studies
15031.....U............... Comparative Literature
15041...................... Classics
15051.....U,G.......... Linguistics
15061.....U............... Communication
15071..................... Creative Writing
15091.....U,G.......... Philosophy
15101.......U............... Religious Studies

15102 ..... U............... Modern Jewish Studies
15103......U............... Islamic and Arabic Studies
15991.....U............... Humanities
17011......U,G......... Mathematics-B.A. degree
17012......G........... $\Phi$ Mathematics Education K-8
17021......U,G .......... Statistics
17031......G.............. Applied Mathematics
17031......U............... Mathematics-B.S. degree
19011......U............... Physical Science
19020....G.............. Mechanical and Aerospace Engineering
19021.....U,G.......... Physics
19051.....U,G......... Chemistry
19051.....U.............. Biochemistry
19081.................... Chemical Physics
19111.......U,G.......... Astronomy
19141.......U,G.......... Geological Sciences
19160.....G.............. Geophysics
20011....U,G .......... Psychology
20013....G.............. School Psychology (Ed.S.)
20031....G.............. Clinical Psychology

Major Code Major
21020....G.............. Public Administration and Latin American Studies (concurrent program)
21021 .....U,G .......... Public Administration
21031 ..... U............... Recreation Administration
21041 .....U,G .......... Social Work
21041 .................... Social Work and Juris Doctor (concurrent program)
21051.....U.............. Criminal Justice

21051 .....G........... $\Phi$ Criminal Justice Administration
22011..... U.............. Social Science
22021....U,G......... Anthropology
22024...U............... Language, Culture, and Society
22041....U,G.......... Economics
22051....U,G......... History
22061....U,G......... Geography

22071 ....U,G .......... Political Science
22081...U,G.......... Sociology
22091....G.............. Criminal Justice and Criminology
22102....G............... Homeland Security
22103....U............... International Security and Conflict Resolution
22111.......U............... Africana Studies
22121..................... American Indian Studies
22131......U,G.......... Chicana and Chicano Studies
22141......U............... Urban Studies

22990 ..U.............. Lesbian, Gay, Bisexual, Transgender, Queer, and Plus (LGBTQ+) Studies
22997 ...U............... Comparative International Studies
49011..................... Environmental Sciences
49012....U.............. Liberal Studies

49017 ....G.............. Liberal Arts and Sciences
49045...G.............. Regulatory Affairs
49061....G.............. Business Administration and Latin American Studies (concurrent program)
49062...G.............. Latin American Studies and Public Health (concurrent program)
49075...G.............. Interdisciplinary Research on Substance Use
49101 .....U............... Sustainability
49991....U,G.......... Women's Studies
49993...U,G.......... Interdisciplinary Studies

Codes for Credentials
Single Subject Instruction. .00100
Multiple Subject Instruction 00200
Bilingual Authorization
Multiple Subject
Single Subject...
Reading and Literacy Leadership Specialist........ 00410
Reading and Literacy Added Authorization.......... 00415
Special Education: Early Childhood Added Authorization. $\qquad$ 00419
Special Education: Early Childhood
Special Education. .00436
Special Education: Mild/Moderate Disabilities............................................... Disabilities.. .00481
Disabilities........................................................ 00482

Administrative Services (Preliminary)...................... 00501
Administrative Services (Professional Clear)...... 00502
School Nurse Services........................................... 00600
Pupil Personnel Services..

Child Welfare and Attendance or............................ 00801
School Social Work.................................................. 00803
School Psychology.................................................. 00804
Speech Language Pathology.................................. 00900
Language, Speech, Hearing,
and Audiology .......................................................... 00902

Audiology...................................................... 00903
Language, Speech, and Hearing including
Special Class Authorization.
.. .00910
Language, Speech, and Hearing adding
Special Class Authorization. . .00911

## Nondegree Curricula

## Preprofessional Programs

Entrance into professional schools is becoming increasingly competitive; therefore, it is imperative that students begin planning their curriculum at the earliest possible time in conjunction with the appropriate academic adviser and your preprofessional adviser.

Students who hold undergraduate degrees who wish to take courses for professional schools may do so through Open University in SDSU Global Campus.

## Prelegal Curriculum

The prelegal program is pursued in conjunction with a degree program. There is no specific prelaw program leading to a bachelor's degree. Students interested in the legal profession should consult with the university prelaw adviser regarding the entrance requirements of the specific law school they hope to attend.

The following curriculum is designed to meet the requirements of standard American schools of law for a broad and liberal education, while at the same time providing desirable flexibility in the individual programs. There are two patterns of concentration which will usually be indicated for the prelegal student, either of which may be selected, in consultation with the adviser, to fit best the interests of the student. These are the major-minor pattern and the liberal studies major pattern. Subject to individual variation, the fields of economics, history, and political science should receive first consideration when choosing the pattern of concentration as being the most effective background for later professional study in law.

The following courses of study are recommended. Lower division: Accountancy 201 and 202, Economics 101 and 102, Political Science 101 and 102, and a year course in history. Upper division: In the junior and senior years students will plan their course with the counsel of their adviser in terms of the field of law in which they plan to work, but keeping in mind the entrance requirements and examinations for admission to schools of law. The following list should receive prime consideration by all prelegal students in the selection of courses, though it is to be thought of as flexible in accordance with student needs. Economics 338; Political Science 301A-301B, 346, 347A, 347B. Additional: Economics 380, History 536, Political Science 348.

In addition to the courses taken in the fields of concentration, upper division electives in English, philosophy, psychology, sociology, and speech communication are recommended. A mastery of English is essential.

Students interested in pursuing a legal career are counseled by the university prelaw adviser. Through this office, prelegal students receive information and advice concerning law school application and admission procedures. Guidance in undergraduate preparation for law study is also available. The university prelaw adviser can be contacted through the Department of Political Science.

## Health Professions Advising Office

The Health Professions Advising Office provides information and guidance for predental, premedical, preoptometry, prepharmacy, prephysician assistant, and preveterinary students as they prepare and apply for admission to professional programs. There is no premed major. Students work with their major adviser and the prehealth adviser to establish an academic plan that includes prehealth requirements as part of, or in addition to, degree requirements. Most prehealth students major in the sciences, but students may pursue any major as long as they also complete coursework required for their chosen health profession.

Prehealth professions students must attend a health professions information session to learn about general requirements and establish a file in the Health Professions Advising Office. Prehealth students should meet each semester with the prehealth adviser. Special topics courses are offered for prehealth students and the many campus prehealth student organizations provide opportunities for students to learn more about specific health professions.

Students may sign up for a health professions information session and open a file any time after the beginning of the semester. The Health Professions Advising Office is located in GMCS 323. Contact the office at 619-594-3030 or visit http://hpao.sdsu.edu. NOTE: Prephysical therapy and preoccupational therapy students should contact an adviser in the School of Exercise and Nutritional Sciences, located in ENS 353 or call 619-594-5161, for additional information.

## Preoccupational Therapy

Students interested in a career in occupational therapy may major in a variety of areas including psychology, kinesiology, art, or biology. There are several schools in California that offer B.S. or M.S. degrees in occupational therapy. Students must complete certain courses required by each school; in general, these include courses in the humanities, natural sciences and mathematics, and social sciences. For further information, contact the American Occupational Therapy Association at http://www.apta.org.

## Prephysical Therapy

The prephysical therapy curriculum is pursued in conjunction with an established major. Students ordinarily select a major in kinesiology (emphasis in prephysical therapy) and complete selected coursework in other departments. Another major often selected is biology. Prephysical therapy students should confer with their departmental adviser prior to initial registration, and at least once each semester regarding their program progress. Course requirements for entry to a graduate program in physical therapy vary according to the institution. Information regarding entrance requirements for specific physical therapy schools is available through the American Physical Therapy Association website at http://www.apta.org. Each student should consult the major adviser for the level of course required when there are alternatives. It is recommended that students consult at least two years prior to graduation with the physical therapy schools to which they are planning to apply in order to learn the details of the entrance requirements for those particular institutions. Students should expect to fulfill the following general requirements for admission: (1) specific course requirements as outlined above; (2) volunteer experience in a hospital or clinical physical therapy program, under the direct supervision of a licensed physical therapist; (3) satisfactory completion of the GRE examination; (4) overall GPA of 3.0 or better (the average GPA of applicants accepted to a physical therapy program is 3.5 ) and; (5) grades of " $B$ " or better in basic science courses (biology, chemistry, physics).

## Preparation for Other Professions

Full programs of professional study in other fields, such as agriculture, forestry, architecture, and theology, are not available at San Diego State University. However, students who may wish to take some undergraduate work in liberal arts at this university can also begin coursework in preparation for such programs. Students are advised to consult the catalog of the university to which they expect to transfer to determine requirements before arranging the program. Further information may be obtained from the assistant dean of students in the appropriate college at San Diego State University.

## PREPROFESSIONAL ADVISING

It is recommended that students contact their preprofessional adviser in their first semester at SDSU. Advisement for students planning to attend professional schools is available for the following programs:

| Predental |  |
| :---: | :---: |
| Geology/Mathematics/Computer Science, |  |
| Room 323 .................................................. | 619-594-3030 |
| Prelaw* |  |
| Adams Humanities, Room 4142. | .619-594-5050 |
| Premedical |  |
| Geology/Mathematics/Computer Science, |  |
| Room 323 | 619-594-3030 |
| Preoccupational Therapy |  |
| Exercise and Nutritional Sciences, Room 331 | 619-594-5161 |
| Preoptometry |  |
| Geology/Mathematics/Computer Science, |  |
| Room 323................................................... | 619-594-3030 |
| Prepharmacy |  |
| Geology/Mathematics/Computer Science, |  |
| Room 323....................................................... | 619-594-3030 |
| Prephysical Therapy |  |
| Exercise and Nutritional Sciences, Room 359 | 619-594-5161 |
| Prephysician Assistant |  |
| Geology/Mathematics/Computer Science, |  |
| Room 323 | 619-594-3030 |
| Prepodiatric Medicine |  |
| Geology/Mathematics/Computer Science, |  |
| Room 323 | 619-594-3030 |
| Presocial Work |  |
| Hepner Hall, Room 109 | 619-594-0780 |
| Preveterinary Medicine |  |
| Geology/Mathematics/Computer Science, |  |
| Room 323 | 619-594-3030 |

[^8]
## Certificate Programs

## Basic Certificate

The purpose of the basic certificate program is to provide individuals whose educational objectives do not require a degree program the opportunity to participate in university academic activities designed to meet specific educational needs.

Ordinarily, credit certificate programs are available to matriculated and nonmatriculated students. Students seeking a certificate must apply for admission according to the guidelines set forth by the individual certificate programs. Graduate students interested in a basic certificate should first consult with the appropriate department and the Office of Financial Aid and Scholarships regarding course requirements and financial aid implications.

Coursework for a basic certificate shall not duplicate in content and level the student's prior educational experience. Unless otherwise stated, a student may apply no more than six units of coursework from a basic certificate program toward a major or minor with the approval of the department.

For a complete listing of certificate programs offered by San Diego State University, refer to the Curricula Summary section of this catalog.

## Advanced Certificate - Post-Baccalaureate

The advanced certificate at the post-baccalaureate entry level provides students a program of coursework leading to a specific applied goal. The general educational background of a bachelor's degree with a major in the appropriate field(s) of study is prerequisite to such a certificate. Courses taken for advanced certificate program may be applied to a master's degree with the approval of the graduate adviser. Students seeking an advanced certificate must be matriculated and apply to SDSU through Cal State Apply.

For a listing of admission standards and specific certificate requirements, refer to the Graduate Bulletin.

## Course Information and Programs

## Absence from Class <br> Instructor Initiated Drop Policy

Students who do not attend the first class session of a course may be dropped from that course by the instructor within the first eight class days of the semester. Students who do not meet prerequisite requirements can also be dropped within the first eight class days of the semester. Any student dropped by the instructor during this period will be notified of the action by e-mail. It is the student's responsibility to keep a current e-mail address on file through the SDSU WebPortal at http://www.sdsu.edu/portal. Summer deadlines vary by session. Consult the Class Schedule for specific dates.

NOT ALL INSTRUCTORS WILL DROP STUDENTS WHO MISS THE FIRST CLASS SESSION OR FOR LACK OF PREREQUISITES. Students are responsible for all courses on their schedules. Students should check their online schedules regularly and take necessary action to add or drop during the schedule adjustment period.

## Religious Observances

By the end of the second week of classes, students should notify the instructors of affected courses of planned absences for religious observances. Instructors shall reasonably accommodate students who notify them in advance of planned absences for religious observances.

## Major Academic Plans (MAPs)

The MAPs website located at http://www.sdsu.edu/mymap was created to help first-time freshmen navigate the course requirements for their majors. Students may also access their personal MAP at http://www.sdsu.edu/portal. The Major Academic Plans (MAPs) created for each major are not meant to encompass every major-specific requirement or a required sequencing of courses. Refer to this catalog for a complete description of requirements, including: course prerequisites, minimum grade requirements, unit limitations, and General Education approved courses and distribution requirements.

The MAPs will help you identify which General Education course will also fulfill a major preparation course requirement. They will also suggest sequencing to ensure that you complete prerequisites for an upper-division course prior to taking the high-er-level course.

Questions about graduation requirements and General Education should be directed to the Academic Advising Center at 619-594-6668. The Academic Advising Center is located in Student Services West, Room 1551 (north of Conrad Prebys Aztec Student Union) and online at http://www.sdsu.edu/advising.

## Numbering of Courses

Courses numbered 80 through 99 are nonbaccalaureate level and are not acceptable for a bachelor's degree; those numbered 100 through 299 are in the lower division (freshman and sophomore years); those numbered 300 through 499 are in the upper division (junior and senior years) and intended for undergraduates; those numbered 500 through 599 are in the upper division and are also acceptable for advanced degrees when taken by students admitted to graduate standing; those numbered 600 through 799 are graduate courses; and those numbered 800 through 899 are doctoral courses.

Courses numbered at the 900 level, except 997, are reserved for graduate courses in certain professional curricula as part of advanced certificate, credential, and licensure programs and are specifically intended for students admitted to the university with post-baccalaureate classified standing. Undergraduate students may enroll in these courses only if they are officially admitted to a blended or integrated program where undergraduate and credential coursework is included in the same program. Courses numbered at the 900 level are not applicable to other graduate programs

Courses numbered 397 offered in regular sessions are professional advancement/training or tutorial/discussion classes that may accompany other credit courses and are not acceptable towards an undergraduate or graduate degree.

Courses numbered X -01 through $\mathrm{X}-79$ and X -397 are professional development units offered only through SDSU Global Campus to meet specific academic needs of community groups and are not acceptable toward an undergraduate or graduate degree.

## Credit Hour or Unit

As of July 1, 2011, federal law (Title 34, Code of Federal Regulations, sections 600.2 and 600.4) requires all accredited institutions to comply with the federal definition of the credit hour. For all CSU degree programs and courses bearing academic credit, the "credit hour" is defined as "the amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than:

1. One hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately 15 weeks for one semester or trimester hour of credit, or 10 to 12 weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or
2. At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution, including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours."
A credit hour is assumed to be a 50 -minute period. In courses in which "seat time" does not apply, a credit hour may be measured by an equivalent amount of work, as demonstrated by student achievement.

## Prerequisites for Undergraduate and <br> Graduate Courses

Students must satisfy course prerequisites (or their equivalent) prior to beginning the course to which they are prerequisite. Students are responsible for knowing the prerequisites of any course for which they intend to enroll (NOTE: Not all courses are checked for prerequisites at the time of registration). Faculty have the authority to enforce prerequisites listed in the current catalog and current Class Schedule, to evaluate equivalent preparation, and to require proof that such prerequisites/preparation have been completed. Students who do not meet prerequisite requirements can be dropped within the first eight days of the semester.

NOT ALL INSTRUCTORS WILL DROP STUDENTS WHO MISS THE FIRST CLASS SESSION OR FOR LACK OF PREREQUISITES. Students are responsible for all courses on their schedules. Students should check their online schedules regularly and take necessary action to add or drop during the schedule adjustment period.

## General Education and American Institution Courses

Notations in brackets at the end of course titles in the course listings identify courses which satisfy General Education [GE] and American Institutions [AI] requirements. See Graduation Requirements for the Bachelor's Degree section in this catalog for full explanation.

## Common Courses

Experimental or Selected Studies or Topics or Workshop Courses (96, 296, 496, 596)

Courses offered by departments under the numbers 296, 496, 596 are subject to the following conditions: no more than nine units of such courses shall be applicable toward a bachelor's degree; such courses may be applicable toward the minor or toward preparation for the major only with the approval of the department chair.

Topics courses may be offered by the departments under the number 96. These courses are nonbaccalaureate level and are not acceptable for a bachelor's degree or General Education.

## Special Study $(299,499,599)$

These courses provide opportunity for individual study of a subject not offered in the regular curriculum. The student does this outside of the classroom and must secure the consent of an instructor to supervise the study before registering for the course. The student should discuss the topic with the instructor and come to an understanding on the amount of time to be devoted to the topic, the credit to be earned, and the mode of investigation and report to be used. As with regular courses, the expectation is that the student will devote three hours per week to the subject for each unit of credit. A maximum combined credit of nine units of 299, 499, and 599 is applicable to a bachelor's degree. Examination credit awarded for a 299 course is excluded from the nine unit limit. Maximum credit of six units of 499 in one department applicable to a bachelor's degree.

A 499 or 599 number cannot be used to offer lower division coursework. Also, 299, 499, and 599 cannot be used to extend internships, to award academic credit in place of pay, for work experience, or for class-sized groups.

## Credit/No Credit Courses

Courses which are offered for credit/no credit are indicated by the symbols $\mathrm{Cr} / \mathrm{NC}$ in the course title.

## Hybrid, Online, and Intercampus Courses

Hybrid, online, and intercampus classes involve a formal educational process in which student and instructor are not necessarily in the same physical location, but interact in a synchronous or asynchronous manner through technology. Classes in which $20 \%$ to $50 \%$ of the scheduled sessions are conducted through this process are defined as hybrid. Classes in which greater than 50\% of the scheduled sessions are conducted through this process are defined as online. Classes in which the instructor is located on one SDSU campus and interacts with students on another SDSU campus shall be defined as intercampus; such intercampus classes shall be arranged through consultations between the instructor and the appropriate personnel on each campus. For all three class modes, any required synchronous interactions (e.g., weekly sessions, aperiodic examinations, capstone presentations) shall be clearly established in the official schedule of classes with respect to specific dates, days, times, and locations as appropriate. Hybrid, online, and intercampus courses offered each term can be found in the Class Schedule.

## Faculty Office Hours

All faculty members are required to hold regularly scheduled office hours during the week to allow for student consultation. A schedule of those hours and contact information is posted outside each faculty member's office door and on their course syllabi.

## Accreditation

San Diego State University is accredited by the Senior College and University Commission of the Western Association of Schools and Colleges, 985 Atlantic Avenue, Suite 100, Alameda CA 94501, 510-748-9001; FAX 510-748-9797; http://www.wascsenior.org. It is also approved to train veterans under the G.I. Bill.

San Diego State University's programmatic accreditation is through membership in the following associations:

Accreditation Board for Engineering and Technology (ABET)
415 N. Charles Street
Baltimore, MD 21201
410-347-7700, http://www.abet.org
Accreditation Council for Graduate Medical Education
(Preventive Medicine Residency Program)
401 North Michigan Avenue, Suite 2000
Chicago, IL 60611
312-755-7498, https://www.acgme.org
American Chemical Society
Committee on Professional Training
1155 Sixteenth Street, NW
Washington, D.C. 20036
202-872-4600, http://www.acs.org
American College of Nurse Midwives Accreditation
Commission for Midwifery Education
8403 Colesville Road, Suite 1550
Silver Spring, MD 20910
240-485-1800, http://www.midwife.org
American Psychological Association (Clinical Psychology)
750 First Street, NE
Washington, D.C. 20002
202-336-5500, http://www.apa.org
California Commission on Teacher Credentialing
1900 Capitol Avenue
Sacramento, CA 95811
888-921-2682, http://www.ctc.ca.gov
Commission on Accreditation Athletic Training Education
6850 Austin Center Boulevard, Suite 100
Austin, TX 78731
512-733-9700, http://www.caate.net
Commission on Accreditation of Healthcare
Management Education
6110 Executive Boulevard, Suite 614
Rockville, MD 20852
301-298-1820, http://www.cahme.org
Commission on Accreditation for Marriage and
Family Therapy Education
112 South Alfred Street
Alexandria, VA 22314
703-838-9808, http://www.aamft.org/iMIS15/AAMFT
Commission on Accreditation in Physical Therapy Education
1111 North Fairfax Street
Alexandria, VA 22314
703-684-2782, http://www.capteonline.org
Council for Interior Design Accreditation
206 Grandville Avenue, Suite 350
Grand Rapids, MI 49503
616-458-0400, http://www.accredit-id.org
Council of Graduate Schools
One Dupont Circle, NW, Suite 230
Silver Spring, MN 20910
202-789-1050, http://www.cgsnet.org
Council on Academic Accreditation in Audiology
and Speech-Language Pathology
2200 Research Boulevard
Rockville, MD 20850
301-296-5700, http://www.asha.org
Council on Education for Public Health
1010 Wayne Avenue, Suite 220
Washington, D.C. 20005
202-789-1050, http://www.ceph.org

Council for the Accreditation of Counseling and Related
Educational Programs (CACREP)
1001 North Fairfax Street, Suite 510
Alexandria, VA 22314
703-535-5990, http://www.cacrep.org
Council on Social Work Education (CSWE)
1701 Duke Street, Suite 200
Alexandria, VA 22314
703-683-8080, http://www.cswe.org
National Association of School Psychologists
4340 East West Highway, Suite 402
Bethesda, MD 20814
301-657-0270, http://www.nasponline.org
National Association of Schools of Art and Design
11250 Roger Bacon Drive, Suite 21
Reston, VA 20190
703-437-0700, http://nasad.arts-accredit.org

## National Association of Schools of Theatre

11250 Roger Bacon Drive, Suite 21
Reston, VA 20190
703-437-0700, http://nast.arts-accredit.org
National Council for Accreditation of Teacher Education
1140 19th Street, Suite 400
Washington, D.C. 20036
202-223-0077, http://www.ncate.org
National Council on Rehabilitation Education
1099 E. Champlain Drive, Suite A, \#137
Fresno, CA 93740
559-906-0787, http://www.ncre.org
National Recreation and Park Association
22377 Belmont Ridge Road
Ashburn, VA 20148
800-626-6772, http://www.nrpa.org
Network of Schools of Public Policy, Affairs, and Administration 1029 Vermont Avenue, NW, Suite 1100
Washington, DC 20005
202-628-8965, http://naspaa.org
Western Association of Graduate Schools
University of Washington, The Graduate School
Box 351240
Seattle, WA 98195
206-543-9054, http://www.wagsonline.org

In addition, San Diego State University is accredited by the following agencies:

The Fowler College of Business and the Charles W. Lamden School of Accountancy are accredited by AACSB InternationalThe Association to Advance Collegiate Schools of Business-at both the undergraduate and graduate levels. Several Fowler College of Business programs are registered with the Certified Financial Planner Board of Standards, 1425 K Street, NW, Suite 500, Washington, D.C. 20005, 202-379-2200.

The College of Engineering undergraduate programs in aerospace engineering, civil engineering, computer engineering, construction engineering, electrical engineering, environmental engineering and mechanical engineering are accredited by the Engineering Accreditation Commission (EAC) of ABET, 415 N. Charles Street, Baltimore, MD 21201, 410-347-7700, http://www. abet.org.

The School of Journalism and Media Studies programs in advertising, journalism, and public relations are accredited by the Accrediting Council on Education in Journalism and Mass Communications, Stauffer-Flint Hall, 1435 Jayhawk Boulevard, Lawrence, KS 66045, 785-864-3973, http://www.acejmc.org.

The School of Nursing is approved by the California State Board of Nursing, State of California, Department of Consumer Affairs, 400 R Street, Suite 4030, Sacramento, CA 95814, 916-322-3350. The baccalaureate and master's degrees in the School of Nursing are accredited by the Commission on Collegiate Nursing Education, 655 K Street NW, Suite 750, Washington, DC 20001, 202-887-6791, http://www.aacnnursing.org/CCNE.

Concentrations in Environmental Health and Occupational Health in the School of Public Health are accredited by the American Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD 21202, 410-347-7700.

The undergraduate program in Athletic Training in the School of Exercise and Nutritional Sciences is accredited by the Commission on Accreditation of Athletic Training Education, 2201 Double Creek Drive, Suite 5006, Round Rock, TX 78664, 512-733-9700, http://www.caate.net.

Foods and Nutrition, the Didactic Program in Dietetics in the School of Exercise and Nutritional Sciences is approved by the Accreditation Council for Education in Nutrition and Dietetics (ACEND), 120 South Riverside Plaza, Suite 2190, Chicago, IL 60606-6995, 800-877-1600 (ext. 5400), http://www.eatright.org/acend.


|  |  |  |
| :---: | :---: | :---: |
| H SEC................ Homeland Security |  |  |
| HTM.................. Hospitality and Tourism Management |  |  |
| HUM ................. Humanities |  |  |
| INT S................. Interdisciplinary Studies |  |  |
| I B...................... International Business |  |  |
| ISCOR $\qquad$ International Security and Conflict Resolution ITAL $\qquad$ Italian |  |  |
| JAPAN............... Japanese |  |  |
| JS..................... Jewish Studies |  |  |
| JMS................... Journalism and Media Studies |  |  |
| KOR.................. Korean |  |  |
| LATAM .............. Latin American Studies |  |  |
| LCS................... Language, Culture, and Society |  |  |
| LDT.................... Learning Design and Technology |  |  |
| LGBT.................. Lesbian, Gay, Bisexual, and Transgender Studies |  |  |
| LIB S..................Liberal Studies |  |  |
| LING.................Linguistics |  |  |
| MGT .................. Management |  |  |
| MIS ................... Management Information Systems |  |  |
| MKTG ............... Marketing |  |  |
| MALAS.............. Master of Liberal Arts and Sciences |  |  |
| MATH ............... Mathematics |  |  |
| M S E................. Mathematics and Science Education |  |  |
| MTHED ............. Mathematics Education |  |  |
| M E.................... Mechanical Engineering |  |  |
| MIL S................. Military Science |  |  |
| M BIO ................ Molecular Biology |  |  |
| MUSIC............... Music |  |  |
| N SCI ................ Natural Science |  |  |
| NAV S............... Naval Science |  |  |
| NURS................ Nursing |  |  |
| NUTR................ Nutrition |  |  |
| OCEAN............. Oceanography |  |  |
| PERS.................Persian |  |  |
| PHIL ..................Philosophy |  |  |
| PHYS .................Physics |  |  |
| POL S ................Political Science |  |  |
| PORT.................Portuguese |  |  |
| PSFA.................Professional Studies and Fine Arts |  |  |
| PSY ................... Psychology |  |  |
| P A..................... Public Administration |  |  |
| P H.................... Public Health |  |  |
| RTM...................Recreation and Tourism Management |  |  |
| R A....................Regulatory Affairs |  |  |
| REL S ................ Religious Studies |  |  |
| RWS..................Rhetoric and Writing Studies |  |  |
| RUSSN..............Russian |  |  |
| SCI................... Science |  |  |
| SWORK............. Social Work |  |  |
| SOC .................. Sociology |  |  |
| SPAN................ Spanish |  |  |
| SPED ................ Special Education |  |  |
| SLHS................. Speech, Language, and Hearing Sciences |  |  |
| STAT .................. Statistics |  |  |
| SUSTN............. Sustainability |  |  |
| TE ..................... Teacher Education |  |  |
| TFM................... Television, Film and New Media |  |  |
| THEA................ Theatre |  |  |
| WMNST .............Women's Studies |  |  |

## Accountancy

In the Fowler College of Business

OFFICE: Student Services East 2411
TELEPHONE: 619-594-5070
E-MAIL: accounting@sdsu.edu
WEBSITE: https://business.sdsu.edu/accountancy
A member of AACSB International-The Association to Advance Collegiate Schools of Business.

## Faculty

Emeritus: Barnett, Butler, Capettini, Chow, Doran, Garrett, Grudnitski, Houston, Joh, Lightner, K., Lightner, S., Meier, Meigs, Samuelson, Toole, Venable, Whittington, Williamson
Director: Chang
The Vern E. Odmark Chair in Accountancy: Chang
Professors: Anderson, Chang, DeBoskey, Krivogorsky, Oestreich
Associate Professors: Chan, Gill, Luo
Assistant Professors: Machado, Perols, Smith, Wang
Offered by the Charles W. Lamden School of Accountancy
Master of Business Administration.
Master of Science degree in accountancy.
Major in accounting with the B.S. degree in business administration.
Major in general business with the B.S. degree in business administration. See Business Administration.
Minor in accounting.
Certificate in taxation (refer to the Graduate Bulletin).

## The Vern E. Odmark Chair in Accountancy

Established in recognition of Dr. Vern Odmark for his 25 years of teaching at SDSU, basic support is provided by contributions from friends, alumni, and corporations, including many major national accounting firms. The chair acknowledges the university's objective of continuing the high standards of teaching excellence and professionalism that characterized Odmark's career.

Dr. Chee W. Chow, widely recognized throughout the country for the breadth of his research and his technical thoroughness, held the chair from 1984 until his retirement in 2006. Dr. C. Janie Chang, recognized for research and teaching was awarded the chair in fall 2006.

## The Major

The major in accounting provides basic concepts of accounting and business knowledge to students seeking professional careers in the field. Growing with the increased complexity of the business world, accounting continues to offer a wide choice of careers and opportunities.

The School of Accountancy offers two programs at the undergraduate level: The Business Accounting Program and the BS/MS 4+1 degree program (BMACC) for a B.S. and M.S. in Accountancy.

The Business Accounting Program offers courses to prepare students for a variety of entry-level financial or general business positions, or for graduate work in accounting, business, or law. This track leads to a B.S. in Business Administration, Accounting.

The BS/MS 4+1 degree program (BMACC) is for students who plan to pursue professional accounting careers in public accounting firms, corporations, and not-for-profit and governmental organizations.

## Business Honors Program

The Business Honors Program offers excellent upper division business students the opportunity to explore issues in our local, regional, and global business environments focusing on the social and ethical responsibility that business has to the community and society. Honors students will enroll in a one unit business honors seminar each semester. During their enrollment they will participate in activities to promote their academic and personal growth, documenting their work in a written portfolio.

Generally, students should apply to this program at the time of application to upper division business. Applicants must submit an essay with their application. Applicants must have a 3.6
cumulative GPA or good standing in the Weber Honors College. Students not meeting these requirements may petition for admission to the program. Successful completion of the Business Honors Program will be recognized at graduation. Contact Dr. Robert A. Judge, Department of Management Information Systems, for more information about this program.

## Statement on Computers

Before enrolling in upper division courses in the Fowler College of Business, students must be competent in the operation of personal computers, including word processing and spreadsheets. Business students are strongly encouraged to have their own computers capable of running word processing, spreadsheet, presentation, e-mail, and Internet applications such as those found in packages sold by major software publishers. Availability of on-campus computing resources can be limited due to increasing demand across the university.

## Retention Policy

The Fowler College of Business expects that all business students will make reasonable academic progress towards the degree. Business premajors who have earned 60 units but have less than a 2.9 may be removed from the premajors and placed in undeclared. Upper division business majors earning less than a 2.0 average in their major GPA for two consecutive semesters may be removed from business and placed in undeclared.

## Transfer Credit

Lower Division: Courses clearly equivalent in scope and content to San Diego State University courses required for minors or as preparation for all business majors will be accepted from regionally accredited United States institutions and from foreign institutions recognized by San Diego State University and the Fowler College of Business.

Upper Division: It is the policy of the San Diego State University Fowler College of Business to accept upper division transfer credits where (a) the course content, requirements, and level are equivalent to San Diego State University courses and (b) where the course was taught in an AACSB International-The Association to Advance Collegiate Schools of Business accredited program. Exceptions require thorough documentation evidencing the above standards.

## Impacted Program

The accounting major is impacted. Before enrolling in any upper division courses in business administration, students must advance to an upper division business major and obtain a business major code. To be admitted to an upper division business major (accounting, finance, financial services, real estate, information systems, management, or marketing), students must meet the following criteria:
a. Complete with a grade of $C(2.0)$ or better: Accountancy 201, 202; Economics 101, 102; Finance 240 (or an approved business law course); Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290 (RWS 290 is not required for the accounting major); and either Statistics 119 or Economics 201. These courses cannot be taken for credit/no credit (Cr/ NC);
b. Complete a minimum of 60 transferable semester units;
c. Have a cumulative GPA of 2.9.

Students who meet all requirements except the GPA may request to be placed on the waiting list. While all spaces are usually filled by eligible students, if there is room in the program after all the fully-qualified students have been accommodated, students will be admitted from the waiting list in GPA order. Contact the Fowler Center for Student Success (EBA-448), 619-594-5828, for more information.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Accounting Major

With the B.S. Degree in Business Administration
(Major Code: 05021) (SIMS Code: 221908)
A minor is not required with this major.
Preparation for the Major. Complete with a grade of $C$ (2.0) or better: Accountancy 201, 202; Economics 101, 102; Finance 240 (or an approved business law course); Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); and either Statistics 119 or Economics 201. (24 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$; the minimum grade in each class is C. Additional progress requirements must be met before a student is admitted to an upper division major.

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above before taking Accountancy 390W and earn a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Business Accounting Program Major. Forty-eight upper division units consisting of Accountancy 331, 332, 333, 334, 390W with a grade of $C(2.0)$ or better, Accountancy 431, 432, and six units of upper division accountancy electives (not including Accountancy 325, 326, or 390W); Business Administration 300, 310, 323, 350, 360, 370. Three units selected from Business Administration 405, Management Information Systems 315, 380, 383, 460, 515. Management Information Systems 301. A "C" (2.0) average or better is required in the courses stipulated here for the major.

BS/MS 4+1 Degree Program (BMACC). (SIMS Code: 221912) The BS/MS 4+1 degree program (BMACC) is for students who plan to pursue professional accounting careers in public accounting firms, corporations, and not-for-profit and government organizations. Students must successfully complete 150 units to be awarded simultaneously the B.S. degree in Business Administration, Accounting, and then the M.S. degree in Accountancy.

Students must apply and be admitted to the BS/MS 4+1 degree program (BMACC). All students must have a satisfactory score on the Graduate Management Admissions Test (GMAT), a minimum overall GPA of 2.85 , a minimum SDSU GPA of 2.85 , and a minimum upper division SDSU Fowler College of Business GPA of 2.85. Students may apply for the program at any time during their undergraduate studies after completing at least two upper division core accountancy courses (must include Accountancy 331) with a minimum overall GPA of 2.85 among the completed courses (upper division Accountancy core courses include Accountancy 331, 332, 333, 334, 431, 432).

Early admission is available to students after completing Accountancy 331 with a B+ (3.3) or better. The GMAT requirement is waived for students in the SDSU accounting major that have an overall GPA of 3.4 , a minimum SDSU GPA of 3.4 , and a minimum upper division SDSU Fowler College of Business GPA of 3.4.

Students attain graduate status when they have earned at least 120 units towards the completion of the BMACC program. No more than nine units may be in 500-level courses to meet the requirements for the master's program. At least 15 units of 500-, 600-, and 700-numbered courses must be in accountancy courses (to include Accountancy 790) and must include at least 12 units in courses numbered 650 and above (in special cases, nine units with adviser approval). Students must achieve at least a 3.0
average in the courses numbered 500 and above and specified on their official program for the 30 unit master's degree. Courses numbered 500 and above must be completed within seven years of the first course completed on the master's degree program. If for any reason a student does not satisfactorily complete the requirements for the Master of Science in Accountancy degree, they will be awarded the B.S. degree in Business Administration in Accounting, upon completion of the requirements for the B.S. degree.

## Accounting Minor

(SIMS Code: 221910)
Admission to the minor in accounting requires completion of at least 60 units with a minimum overall GPA of 2.9 , and completion of Accountancy 201 and 202 and Economics 101 and 102 with grades of $C$ (2.0) or better.

The minor in accounting consists of a minimum of 24 units to include Accountancy 201, 202, 331*, 332*, 333, 334, Economics 101, 102.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University. Students with a major in the Fowler College of Business, Hospitality and Tourism Management, or International Business should choose courses carefully with an adviser in their major department and the Fowler Center for Student Success.

Students must meet the prerequisites for the minor in effect at the time they declare the minor. Contact the Fowler Center for Student Success (EBA-448) for admissions criteria and procedures.

> *Finance majors must substitute Accountancy 431 and 432 or two
> Accountancy 500 -level electives for Accountancy 331 and 332 .
> Accountancy 390W is waived for finance majors who are also seeking an
> accounting minor in taking Accountancy 431 .

## Courses (ACCTG)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

## ACCTG 201. Financial Accounting Fundamentals (3)

Theory and practice of accounting applicable to recording, summarizing, and reporting of business transactions for external reporting and other external uses. Asset valuation; revenue and expense recognition; various asset, liability, and capital accounts.

## ACCTG 202. Managerial Accounting Fundamentals (3)

Prerequisite: Minimum grade of C in Accountancy 201. Proof of completion of prerequisite required: Copy of transcript.

Selection and analysis of accounting information for internal use by managers. Using financial information for planning and control purposes.

## ACCTG 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

ACCTG 325. Intermediate Managerial and Tax Accounting (3)
Prerequisites: Accountancy 202. Approved upper division business major or minor or other approved major. Not open to accounting majors. Proof of completion of prerequisites required: Copy of transcript.

Theories, practices, and concepts to provide planning and control information to decision makers; tax considerations that impact managerial planning and decision making. May not be taken for credit by accounting majors.

## ACCTG 326. Intermediate Financial Accounting (3)

Prerequisites: Accountancy 202. Approved upper division business major or minor or other approved major. Not open to accounting majors. Proof of completion of prerequisites required: Copy of transcript.

Theories, practices, and concepts needed to satisfy the decision making requirements of external users; financial reporting for enterprises engaged in international trade of business. May not be taken for credit by accounting majors.

## ACCTG 331. Intermediate Accounting I (3)

Prerequisites: Admission to accounting major, minor, or certificate. Minimum grade of $C$ in Accountancy 201 and 202. For approved business majors, credit or concurrent registration in Business Administration 310. Proof of completion of prerequisites required: Copy of transcript.

Concepts and methods underlying financial statements (including IFRS introduction). Not open to students with credit in Accountancy 325 and 326.

## ACCTG 332. Taxation of Business Entities (3)

Prerequisites: Minimum grade of $C$ in Accountancy 331. Proof of completion of prerequisites required: Copy of transcript.

Concepts and methods underlying taxation of business entities. Not open to students with credit in Accountancy 325 and 326.
ACCTG 333. Accounting Information Systems (3)
Prerequisite: Minimum grade of C in Accountancy 331. Proof of completion of prerequisite required: Copy of transcript.

Accounting information systems for internal and external decision making. (Accountancy 333 and 334 formerly numbered Accountancy 322.)
ACCTG 334. Intermediate Accounting II (3)
Prerequisite: Minimum grade of $C$ in Accountancy 331. Proof of completion of prerequisite required: Copy of transcript.

Financial reporting issues; preparation and use of financial statement information. (Accountancy 333 and 334 formerly numbered Accountancy 322.)
ACCTG 390W. Reporting Techniques for Accountants (4)
Prerequisite: Minimum grade of $C$ in Accountancy 331. Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a grade of $C(2.0)$ or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisite required: Test score or verification of exemption; copy of transcript.

Advanced preparation of written and oral reports with application to professional needs of accountants. (Formerly numbered Information and Decision Systems 390W/Management Information Systems 390W.)

## ACCTG 409. Field Study in Taxation (1) $\mathrm{Cr} / \mathrm{NC}$

Prerequisite: Credit or concurrent registration in Accountancy 325,332 , or 503 . Proof of completion of prerequisite required: Copy of transcript.

Income tax preparation in the field. Follows procedures of IRS VITA Program. IRS instruction followed by faculty supervised fieldwork. Student must be available for special IRS tax school. Maximum credit three units.

## ACCTG 431. Auditing (3)

Prerequisites: Minimum grade of $C$ in Accountancy 333 and credit or concurrent registration in Accountancy 390W. Proof of completion of prerequisites required: Copy of transcript.

Audit of financial statements in accordance with generally accepted auditing standards; ethics in auditing. (Accountancy 431 and 432 formerly numbered Accountancy 421.)

## ACCTG 432. Cost Management (3)

Prerequisites: Accountancy 333 with a minimum grade of $C$ and Business Administration 323. Proof of completion of prerequisites required: Copy of transcript.

Use of accounting information and data analytics to facilitate business decisions; cost management and ethics in managerial accounting. (Accountancy 431 and 432 formerly numbered Accountancy 421.)

## ACCTG 496. Selected Topics in Accountancy (1-4)

Prerequisite: Consent of department chair.
Selected areas of concern in accountancy. May be repeated with new content with consent of department chair. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

## ACCTG 498. Investigation and Report (1-3)

Prerequisite: Consent of instructor and senior standing.
A comprehensive and original study of a problem connected with accounting under the direction of one or more members of the accounting staff. May be repeated with new content. Maximum credit six units.

## ACCTG 499. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

ACCTG 501. Advanced Financial Accounting (3)
Prerequisite: Accountancy 334. Proof of completion of prerequisites required: Copy of transcript.

Advanced financial accounting topics. Partnerships, consolidations, foreign currency transactions and financial statements, accounting for derivatives and hedging, accounting for bankruptcy and reorganizations.
ACCTG 503. Federal Taxation of Individuals (3)
Prerequisites: Accountancy 201 and 202. Approved upper division business major, business minor, or other approved major. Proof of completion of prerequisites required: Copy of transcript.

Taxation of individuals, including income, deductions, credits, social security taxes, and property transactions.
ACCTG 505. Fraud Examination (3)
Prerequisite: Accountancy 431 or 626. Proof of completion of prerequisite required: Copy of transcript.

Skills and tools for auditors, consultants, tax professionals, managers. Techniques and technologies for fraud investigation and interviewing. Case analysis, research of public records, ethical decision making for accountants. Service learning project.
ACCTG 508. Accounting for Not-For-Profit Organizations (3)
Prerequisite: Minimum grade of C in Accountancy 326 or 331. Proof of completion of prerequisite required: Copy of transcript.

Principles of modified accrual accounting in state and local governmental units, hospitals, colleges, and universities. Budgetary accounting, appropriations, encumbrances, internal controls, and auditing procedures.

## ACCTG 522. International Financial Reporting (3)

Prerequisites: Accountancy 334 and satisfaction of Graduation Writing Assessment Requirement. Proof of completion of prerequisites required: Copy of transcript.

Accounting convergence, IASB-FASB joint projects. US and international financial reporting issues and standards.
ACCTG 596. Contemporary Topics in Accounting (1-3)
Prerequisites: Business major approved by the Fowler College of Business and consent of instructor.

Contemporary topics in modern accounting. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496,596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

# Administration, Rehabilitation and Postsecondary Education 

In the College of Education

OFFICE: Education and Business Administration 246
TELEPHONE: 619-594-6115
WEBSITE: http://interwork.sdsu.edu/arpe
Accredited by the Council on Rehabilitation Education.

## Faculty

Emeritus: Atkins, Hampton, Jacobs, McFarlane, Morey, Olney, Piland, Stevens
Chair: Sax
Professors: Bresciani Ludvik, Degeneffe, Harris, Sax, Wood
Associate Professors: Herrera Villarreal, Tucker
Assistant Professors: Felix, Peterson, Vasquez-Urias Lecturer: Gates
Offered by the Department
Doctor of Education degree in educational leadership. Concentration in community college/ postsecondary leadership.
Master of Arts degree in education.
Concentration in educational leadership with a specialization in postsecondary education.
Concentration in educational leadership with a specialization in student affairs in postsecondary education.
Master of Science degree in rehabilitation counseling. Concentration in clinical rehabilitation and clinical mental health counseling.
Minor in leadership development.
Certificate in cognitive disabilities (refer to the Graduate Bulletin).
Certificate in community college teaching (refer to the Graduate Bulletin).
Certificate in psychiatric rehabilitation (refer to the Graduate Bulletin).
Certificate in rehabilitation administration (refer to the Graduate Bulletin).
Certificate in rehabilitation counseling (refer to the Graduate Bulletin).
Certificate in rehabilitation technology (refer to Engineering section in the Graduate Bulletin).
Certificate in supported employment and transition specialist (refer to the Graduate Bulletin).
Certificate in workforce education and lifelong learning (refer to the Graduate Bulletin).

## Leadership Development Minor <br> (Minor Code: 08271) (SIMS Code: 331907)

The minor in leadership development consists of a minimum of 15 units to include Administration, Rehabilitation and Postsecondary Education 205, 207, 403, 404, 405; and six units of electives selected from Business Administration 350, Communication 307, 371, 485, 492, International Security and Conflict Resolution 324, Management 475, Philosophy 329, 330, 332 [or Sustainability 332], 340, Psychology 319, 320, 321, Public Administration 330, 340,480 , or other upper division elective courses with consent of the adviser.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Courses (ARP)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

ARP 201. Introductory Statistics and Research Design for Education (3) [GE]
Prerequisites: Satisfaction of the SDSU Mathematics/Quantitative Reasoning Assessment requirement and consent of instructor.

Understanding, interpreting, and applying educational research. Basic research design, sampling, distributions, reliability, validity, descriptive statistics, inferential statistics, hypothesis testing, tests of significance, and evaluating an education research report. Students with credit or concurrent registration in the following lower division courses will be awarded a total of four units for the two (or more) courses: Administration, Rehabilitation and Postsecondary Education 201; Biology 215; Civil Engineering 160; Economics 201; Linguistics 270; Political Science 201; Psychology 280; Sociology 201; Statistics 119, 250.
ARP 205. Exploring Leadership (3) [GE]
Understanding, applying and critiquing leadership theories, examining personal strengths, values, goals, and philosophy of leadership.

## ARP 207. Leadership Community Service (1-3)

Community service and concepts associated with the servant leadership model. Not open to students with credit in Educational Leadership 206. Maximum credit six units.

## ARP 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
ARP 380. Principles of Adult and Vocational Education (3)
Principles, practices, scope, and functions of adult and vocational education.
ARP 382. Directed Teaching (2-4) Cr/NC
Prerequisite: Administration, Rehabilitation and Postsecondary Education 380.

Systematic observation, participation, and teaching under supervision in an occupational subject matter area. Application to take this course must be made in preceding semester.
ARP 397. Problems in Education (Credit to be arranged) (Offered only through SDSU Global Campus)
Prerequisite: Consent of instructor.
Class study of specially selected problems in education. Does not apply to pattern requirements for credentials. Credit earned in this course not applicable to a bachelor's degree.

## ARP 403. Leadership - Campus Leadership Experience (1)

Prerequisite: Administration, Rehabilitation and Postsecondary Education 205.

Laboratory on campus and at other postsecondary settings to integrate academic work with experiences on campus and in postsecondary settings.

ARP 404. Leadership Internship and Career (1)
Laboratory in public agencies and business settings to integrate academic work with experiences in the community. (Formerly numbered Educational Leadership 404.)
ARP 405. Enacting Leadership (3)
Prerequisite: Completion of all courses in the leadership development minor with a 3.0 GPA.

Capstone course. Synthesis and integration of learning to demonstrate self-efficacy. Apply analytical reasoning in leadership scenarios. Articulate individual leadership abilities and apply leadership principles to major field and career. (Formerly numbered Educational Leadership 405.)

## ARP 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## ARP 499. Special Study (1-3)

Prerequisite: Consent of instructor. Open only to senior and graduate students in education who have shown ability to work independently.

Individual study. Maximum credit six units.

## UPPER DIVISION COURSE

(Also Acceptable for Advanced Degrees)

## ARP 596. Topics in Administration, Rehabilitation and

Postsecondary Education (1-3)
Selected topics in Administration, Rehabilitation and Postsecondary Education. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

## Refer to the Graduate Bulletin.

# Aerospace Engineering 

In the College of Engineering

OFFICE: Engineering 308
TELEPHONE: 619-594-6074
E-MAIL: ae@engineering.sdsu.edu
WEBSITE: http://aerospace.sdsu.edu
The undergraduate degree in Aerospace Engineering is accredited by the Engineering Accreditation Commission (EAC) of ABET, http://www.abet.org.

## Faculty

Emeritus: Conly, Nosseir, Pierucci, Shutts, Wang
Chair: Lu
Professors: Demasi, Jacobs, Katz, Lu, Narang, Plotkin, Venkataraman

## Assistant Professors: Bani Younes, Chen, Liu, Popov

## Offered by the Department

Doctor of Philosophy degree in engineering sciences:
(bioengineering), (electrical and computer engineering),
(mechanical and aerospace engineering), (structural engineering).
Master of Engineering.
Master of Science degree in aerospace engineering.
Major in aerospace engineering with the B.S. degree.

## Transfer Credit

No credit will be given for upper division engineering coursework taken at an institution having an engineering program which has not been accredited by the Engineering Accreditation Commission (EAC) of ABET, unless the student successfully completes the first 12 units of engineering work attempted at this university. At that time, and upon recommendation of the department, credit will be given for the unaccredited work.

## The Major

The objectives of the aerospace engineering program are to produce Bachelor of Science graduates who will (1) be successfully employed in government laboratories, industry, organizations, or small businesses and contribute to the advancement of aerospace engineering and related fields; (2) continue to advance in their careers on the merits of their skills in communication and teamwork, ethical behavior, leadership abilities, and technical problem solving; (3) continue their professional development by pursuing graduate degrees or utilizing educational and career building opportunities provided through their employer or professional societies.

The aerospace industry, the second largest industry in our country, is one of the largest employers of engineers. Opportunities for employment in entry level positions in large aircraft companies, general aviation manufacturers, or government aero-space-related laboratories are good. Graduates of the program are also qualified to continue their formal education at the graduate level or to accept entry level positions in several nonaerospace fields.

## Retention Policy

The engineering program expects all majors will make reasonable academic progress toward the degree. Engineering premajors who have either (1) completed major preparatory courses, earned 60 units, but have less than a 2.7 cumulative GPA; or (2) earned 60 units but have not completed major preparatory courses and/or have less than a 2.7 cumulative GPA may be removed from the premajor and placed in undeclared.

## Impacted Program

The aerospace engineering major is an impacted program. To be admitted to the aerospace engineering major, students must meet the following criteria:
a. Complete with a grade of $C(2.0)$ or better: Aerospace Engineering 200 [or Mechanical Engineering 200]; Chemistry 202 (or 200); Mathematics 150, 151; Physics 195, 196. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Have an overall cumulative GPA of 2.7.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Aerospace Engineering Major <br> With the B.S. Degree

## (Major Code: 09021) (SIMS Code: 441001)

Students majoring in aerospace engineering must include in their program a sequence of fundamental courses. In addition, the students have the opportunity to satisfy their particular areas of interest by selecting a pattern of study indicated in the sequence below. This pattern includes typical aerospace engineering topics, such as aerospace vehicle design, structural analysis, aerodynamics, and propulsion. This program requires 140 units to include general education.

Preparation for the Major. Aerospace Engineering 123, 280; Aerospace Engineering 200 [or Mechanical Engineering 200]; Aerospace Engineering 220 [or Mechanical Engineering 220]; Biology 100 or 101; Chemistry 202 (or 200); Electrical Engineering 204; Mathematics 150, 151, 252; Mechanical Engineering 190, 202, 240; Physics 195, 195L, 196, 197. (50 units)

Aerospace Engineering 200 [or Mechanical Engineering 200]; Chemistry 202 (or 200); Mathematics 150, 151; Physics 195, 196 must be completed with a grade of $C$ (2.0) or better. In addition, Aerospace Engineering 280 must be completed with a grade of $C$ (2.0) or better. These courses cannot be taken for credit/no credit (Cr/NC).

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of $C$ (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 51 upper division units to include Aerospace Engineering 301, 302, 303, 310, 320, 340, 341, 403, 410, 430, 440, 460A, 460B, 515; Civil Engineering 301 (or Mechanical Engineering 304), 302; Mechanical Engineering 350; and six units selected from Aerospace Engineering 510, 520, 530, 535 [or Mechanical Engineering 535], 540, 546, 550.

Other electives may be substituted with consent of the adviser and department chair.

Master Plan. The master plan provides an advising record for aerospace engineering majors and should be initiated by the student with their faculty adviser during the second semester of the freshman year. All students must have a master plan on file in the department prior to enrollment in Aerospace Engineering 301 or 310. The master plan must be reviewed each semester with the faculty adviser before registration. All course substitutions must be approved by the department chair.

## Courses (AE)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

## A E 123. The Aerospace Engineer (1)

Introduction to professional aerospace engineering. Emphasis on aeronautics and astronautics.

## AE 200. Statics (3)

(Same course as Mechanical Engineering 200)
Prerequisites: Mathematics 150 and Physics 195 with a grade of C (2.0) or better in each course. Proof of completion of prerequisites required: Copy of transcript.

Force systems, equilibrium, structures, distributed forces, friction, virtual work, moments of inertia, vector algebra.

## A E 220. Dynamics (3)

(Same course as Mechanical Engineering 220)
Prerequisites: Aerospace Engineering 200 [or Mechanical Engineering 200] and Mathematics 151 with a grade of C (2.0) or better in each course. Proof of completion of prerequisites required: Copy of transcript.

Kinetics of a particle; central force motion; systems of particles; work and energy; impulse and momentum; moments and products of inertia; Euler's equations of motion; vibration and time response; engineering applications.

## A E 280. Methods of Analysis (3)

Prerequisite: Mathematics 151 with minimum grade of C . Recommended: Mathematics 252.
Selected topics from ordinary differential equations, the Laplace transform, Fourier series, and linear algebra, with engineering applications.

## A E 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

## A E 301. Low Speed Aerodynamics (3)

Prerequisite: Credit or concurrent registration in Aerospace Engineering 340.
Subsonic flow, airfoil and wing theory, experimental characteristics of wing sections, high lift devices.

## A E 302. High Speed Aerodynamics (3)

Prerequisites: Aerospace Engineering 301 and Mechanical Engineering 350.
Supersonic flow, two- and three-dimensional compressible flow, wings in compressible flow, two- and three-dimensional method of characteristics, transonic flow.

## AE 303. Experimental Aerodynamics (2)

One lecture and three hours of laboratory.
Prerequisites: Aerospace Engineering 341 and credit or concurrent registration in Aerospace Engineering 301.
Operating characteristics of subsonic and supersonic wind tunnels. Aerodynamic characteristics of wings and bodies. Flow visualization techniques. Force, moment and pressure distribution measurement. Use of hot-wire anemometer and schlieren equipment.

## A E 310. Aerospace Structural Analysis (3)

Prerequisites: Mechanical Engineering 240; and Civil Engineering 301 (or Mechanical Engineering 304).

Methods of static structural analysis of problems encountered in flight of aerospace vehicles.

## A E 320. Astrodynamics (3)

Prerequisites: Aerospace Engineering 220 [or Mechanical Engineering 220] and Aerospace Engineering 280.

Two-body orbital mechanics on Keplerian orbits and orbital transfers.

## A E 340. Fluid Mechanics (3)

Prerequisites: Credit or concurrent registration in Aerospace Engineering 280 and for aerospace or mechanical engineering majors, Aerospace Engineering 220 [or Mechanical Engineering 220] or for construction management, and civil, construction, or environmental engineering majors, Civil Engineering 225.

Fluid statics. Laminar and turbulent flow of liquids and gases in pipes, nozzles, and channels. Dimensional analysis and modeling. Drag forces on moving or immersed objects. Not open to students with credit in Mechanical Engineering 360.

## A E 341. Fluid Mechanics Laboratory (1)

Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Aerospace Engineering 340 or Mechanical Engineering 360 for mechanical engineering majors.

Flow measuring devices. Experimental applications of continuity, Bernoulli and momentum equations. Model studies. Pipe and channel flows. Flow visualization techniques. Operating characteristics of wind tunnel and water table.
A E 403. Aerospace Engineering Senior Project (3)
One lecture and six hours of laboratory.
Prerequisites: Aerospace Engineering 302, 303, 340.
Design and build an aerospace project, conduct experimental measurements, perform analyses of measured data.

## A E 410. Aerospace Structural Dynamics (3)

Prerequisite: Credit or concurrent registration in Aerospace Engineering 310.

Methods of structural dynamic analysis of problems encountered in aerospace vehicles.

## A E 430. Aircraft Propulsion Systems (3)

Prerequisite: Aerospace Engineering 302.
Theory and performance characteristics of aircraft propulsion systems including reciprocating engines, turbojets, ramjets, etc.
A E 440. Aircraft Stability and Control I (3)
Prerequisite: Aerospace Engineering 303.
Static stability and control, general equations of unsteady motion, stability derivatives, stability of uncontrolled motion, response of aircraft to actuation of controls.
A E 460A. Aerospace Engineering Applications (3)
One lecture and five hours of design activity.
Prerequisites: Aerospace Engineering 302, 303, 310.
Student projects in aerospace design.
A E 460B. Aerospace Engineering Applications (2) Six hours of laboratory.
Prerequisite: Aerospace Engineering 460A.
Student projects in aerospace design.
A E 496. Advanced Aerospace Engineering Topics (1-3)
Prerequisite: Consent of instructor.
Modern developments in engineering. See Class Schedule for specific content. Maximum credit six units for any combination of Aerospace Engineering 496, 499, and 596.

## A E 499. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units for any combination of Aerospace Engineering 496, 499, and 596.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

A E 510. Finite Element Methods in Aerospace Structures (3)
Prerequisite: Aerospace Engineering 410.
Static and dynamic analysis of aerospace structures utilizing finite element methods.
AE 515. Methods of Analysis (3)
Prerequisite: Aerospace Engineering 280 with minimum grade of $C$.

Selected topics from vector calculus, partial differential equations, and complex analysis, with engineering applications.

## AE 520. Spacecraft Attitude Dynamics and Control (3)

Prerequisite: Aerospace Engineering 320 or graduate standing.
Spacecraft rigid-body attitude dynamics and feedback control.

## A E 530. Rocket and Space Propulsion (3)

Prerequisite: Aerospace Engineering 430.
Equilibrium combustion thermodynamics. Performance of rocket propelled vehicles. Rocket propulsion fundamentals. Topics in chemical (solid and liquid) and electrical propulsion systems.

## A E 535. Mechanics of Composite Structures (3)

(Same course as Mechanical Engineering 535)
Prerequisites: Aerospace Engineering 280 and Aerospace Engineering 310 or Mechanical Engineering 314.

Micro- and macro-mechanics of composite materials, classical lamination theory, initial failure prediction and progressive failure analysis of laminates, analysis of beam and plate structures, stiffness and strength based design of composites.

## A E 540. Aircraft Stability and Control II (3)

Prerequisite: Aerospace Engineering 440.
Dynamic stability and control of rigid aircraft; general equations of unsteady motion, stability derivatives, perturbed state thrust forces and moment, special problems in dynamic stability and response.

## A E 546. Aerospace Guidance and Navigation (3)

Prerequisite: Aerospace Engineering 320 with a grade of C (2.0) or better or graduate standing.

Principles and theories of navigation for aerospace vehicles. Aerospace guidance for entry vehicles, launch vehicles, missiles, and spacecraft. Classical and advanced guidance designs.

## A E 550. Viscous Flow (3)

Prerequisites: Aerospace Engineering 340 and credit or concurrent registration in Aerospace Engineering 515.

Kinematics of fluid motion. Conservation of mass, momentum, and energy. Navier-Stokes equations; exact solutions. Boundary layer approximations, turbulent flow.

## A E 596. Advanced Aerospace Engineering Topics (3)

Prerequisite: Consent of instructor.
Modern developments in aerospace engineering. May be repeated with new content. See Class Schedule for specific content. Maximum credit of six units for any combination of Aerospace Engineering 496, 499, and 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

# Aerospace Studies 

In the College of Professional Studies and Fine Arts

OFFICE: Exercise and Nutritional Sciences 385<br>TELEPHONE: 619-594-5550<br>E-MAIL: 75AFROTC@sdsu.edu<br>Faculty<br>Chair: Grimm<br>Professor: Grimm<br>Assistant Professor: Bugg<br>Offered by the Department<br>AFROTC curriculum.

Minor in Air Force leadership studies.

## AFROTC Curriculum

The department offers a three- or four-year Air Force Reserve Officers Training Corps program designed to develop officers who have broad understanding and high growth potential. For qualified students, two, three, or four-year scholarships are available in certain areas on a competitive basis. Scholarships pay full tuition at SDSU and various laboratory, textbook, and incidental fees plus a monthly nontaxable allowance of \$300-\$500 during the school year. Cadets participate in dialogues, problem solving, and other planning activities designed to develop leaders and managers. All coursework is done on campus with the exception of field trips and one field training encampment conducted at a military base.

A two week field training camp is required for all students during the summer between the sophomore and junior years. Field training emphasizes military orientation for the junior officer and aircraft and aircrew familiarization. Cadets receive physical training and participate in competitive sports. They observe selected Air Force units perform everyday operations, and they are trained in drill and ceremonies, preparation for inspections, and the use of weapons. Upon completion of the AFROTC program and all requirements for a bachelor's degree, cadets are commissioned Second Lieutenants in the Air Force and serve a minimum of four years active duty. Graduates go on active duty in a specialty consistent with their academic major, their desires, and existing Air Force needs. Graduates may request a delay from entry on active duty to continue their education or may apply for Air Force sponsored graduate study to begin immediately upon entry on active duty.

## Applying for the Program

SDSU students enroll in aerospace classes by signing up for courses in the same manner as other university classes. There is no advance application needed for the freshman or sophomore (AS 100/200) classes. However, an orientation program, held just prior to the start of each term, is recommended and designed to give new cadets a broad, realistic introduction to Air Force officer training and provide them with helpful, important information on meeting academic requirements. Contact the Aerospace Studies Department as early as possible for additional information and sign-up procedures. The last two years of AFROTC (AS 300/400) lead to the commission as a Second Lieutenant for which students must apply during the sophomore year. The application process involves taking the Air Force Officer Qualification Test (AFOQT), a physical examination, a physical fitness test, and a personal interview. Students from other institutions in the San Diego area are eligible to take AFROTC and should check with the department to obtain enrollment procedures. Additional information can be obtained from the following websites: http://afrotc.com, http://airforce.com, and http://det075.sdsu.edu.

## Air Force Leadership Studies Minor <br> (Minor Code: 01019) (SIMS Code: 660102)

The minor in Air Force leadership studies consists of a minimum of 15 units in aerospace studies, 12 of which must be upper division.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.
Courses (A S)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

A S 91A-91B. Leadership Laboratory (1-1) $\mathrm{Cr} / \mathrm{NC}$
One hour and fifty minutes of activity per unit.
Prerequisites: Concurrent registration in Aerospace Studies 100A for Aerospace Studies 91A; concurrent registration in Aerospace Studies 100B for Aerospace Studies 91B.

Designed to prepare junior cadets for positions as leaders and managers of the cadet corps and a commission in the US Air Force. Application of principles of motivation, time management, organizational behavior, and participative group management in solving problems. Leadership laboratory is open to students who are members of the Reserve Officer Training Corps or who are eligible to pursue a commission as determined by the professor of aerospace studies. Credit earned in this course is not applicable to a bachelor's degree.

## A S 92A-92B. Leadership Laboratory (1-1) Cr/NC

One hour and fifty minutes of activity per unit.
Prerequisites: Concurrent registration in Aerospace Studies 200A for Aerospace Studies 92A; concurrent registration in Aerospace Studies 200B for Aerospace Studies 92B.

Designed to prepare junior cadets for positions as leaders and managers of the cadet corps and a commission in the US Air Force. Application of principles of motivation, time management, organizational behavior, and participative group management in solving problems. Leadership laboratory is open to students who are members of the Reserve Officer Training Corps or who are eligible to pursue a commission as determined by the professor of aerospace studies. Credit earned in this course is not applicable to a bachelor's degree.

## A S 93A-93B. Leadership Laboratory (1-1) Cr/NC

One hour and fifty minutes of activity per unit.
Prerequisite: Concurrent registration in Aerospace Studies 300A for Aerospace Studies 93A; concurrent registration in Aerospace Studies 300B for Aerospace Studies 93B.

Demonstration laboratory designed to develop leadership and management skills, problem-solving skills, and exercise group planning, organizing and coordinating activities. Leadership laboratory is open to students who are members of the Reserve Officer Training Corps or who are eligible to pursue a commission as determined by the professor of aerospace studies. Credit earned in this course is not applicable to a bachelor's degree.

## A S 94A-94B. Leadership Laboratory (1-1) Cr/NC

One hour and fifty minutes of activity per unit.
Prerequisite: Concurrent registration in Aerospace Studies 400A for Aerospace Studies 94A; concurrent registration in Aerospace Studies 400B for Aerospace Studies 94B.

Demonstration laboratory designed to develop leadership and management skills, problem-solving skills, and exercise group planning, organizing and coordinating activities. Leadership laboratory is open to students who are members of the Reserve Officer Training Corps or who are eligible to pursue a commission as determined by the professor of aerospace studies. Credit earned in this course is not applicable to a bachelor's degree.

AS 100A-100B. Heritage and Values of the United States Air Force (1-1)
Meets one hour per week.
Prerequisite for AFROTC cadets: Concurrent registration in Aerospace Studies 91A for Aerospace Studies 100A; concurrent registration in Aerospace Studies 91B for Aerospace Studies 100B.

Overview of the United States Air Force to include basic characteristics, missions, and organization.

## A S 200A-200B. Team and Leadership Fundamentals (1-1)

Meets one hour per week.
Prerequisite for AFROTC cadets: Concurrent registration in Aerospace Studies 92A for Aerospace Studies 200A; concurrent registration in Aerospace Studies 92B for Aerospace Studies 200B.

Foundations and development of cadet leadership on a personal level and within a team. Field training experiences.

## A S 233. Field Training Unit (2-3) Cr/NC

Required for advanced cadets, military orientation, and flight familiarization. Credit granted for field training camp on basis of individual student application with approval of Aerospace Studies department chair.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

## A S 300A-300B. Leading People and Effective Communication (3-3)

Advanced skills and experiences in communication, leadership, and management in supervised environments.
A S 400A-400B. National Security Affairs/Preparation for Active Duty (3-3)
Roles of military officers in American society. Complex social and political issues facing military professions. Preparation for active duty.

## A S 499. Special Study (1-3)

Prerequisite: Consent of Aerospace Studies department chair. Individual study. Maximum credit six units.

## Africana Studies

In the College of Arts and Letters

OFFICE: Arts and Letters 373
TELEPHONE: 619-594-6531
WEBSITE: http://africana.sdsu.edu
Faculty
Emeritus: Chambers, Cornwell, Kornweibel, Weber
Chair: Alkebulan
Professor: Toombs
Associate Professor: Alkebulan
Assistant Professors: Alameen-Shavers, Jayawardene
Lecturers: Fisher, Merritt, Reddick
Offered by the Department
Major in Africana studies with the B.A. degree
in liberal arts and sciences.
Minor in Africana studies.
Minor in African studies. See Interdisciplinary Programs.

## The Major

Africana studies offers a broad, interdisciplinary program. The curriculum is designed to focus on a variety of subjects pertaining to the Africana experience. It is also concerned with strengthening links between black students and the black community, and developing frameworks for social change and the struggle for black dignity. It seeks, in short, to provide a total educational experience of the Africana culture. The courses offered in Africana studies are available to anyone who is interested.

The major provides excellent preparation for the fields of law, government, foreign service, business administration, research, consulting, librarianship, counseling, program development, program design, program analysis, urbanology, and writing, to name a few, as well as the more traditional Africana studies profession of teaching.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Impacted Program

The Africana studies major is an impacted program. To be admitted to the Africana studies major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Africana Studies Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 22111) (SIMS Code: 110301)

All candidates for the degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in Africana studies courses can apply to the degree.

A minor is not required with this major.
Preparation for the Major. Africana Studies 101 and 170A; and three units selected from Africana Studies 170B, 240, 260. (9 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Study Abroad Requirement. Majors specializing in African Studies or Diaspora Studies are required to complete a minimum of three units of study abroad experience in Africa or in the Black diaspora (excluding the United States). To meet this requirement, majors must have the study abroad experience approved with written consent of the undergraduate adviser and department chair.

Major. A minimum of 27 upper division units to include Africana Studies 327, 490, and 12 units selected from one of the following areas; six units from one of the other areas and three units from the remaining area. Up to six units, with appropriate content, of 496 and 499 in any combination may be applied to an area of specialization with the approval of the department chair. With the exception of Africana Studies 485 , no course may be used to satisfy more than one area of specialization.
African American Studies: Africana Studies 321, 322, 331, 332, 341, 363 [or Linguistics 363], 365A [or English 365A], 365B [or English 365B], 380, 385, 421, 422, 423, 455, 466, 471, 476, 485. Study abroad is recommended.

African Studies: Africana Studies 423, 465 [or French 465], 466, 470, 472, 473, 485; Political Science 364; Religious Studies 328*. Study abroad is required.
Diaspora Studies: Africana Studies 300, 320, 351 [or Religious Studies 351], 421, 476, 485. Study abroad is required.
*Additional prerequisites required.

## Africana Studies Minor

## (SIMS Code: 110301)

The minor in Africana studies consists of a minimum of 18 units in Africana Studies, of which 12 units must be upper division, to include Africana Studies 101 and three additional units selected from the courses for preparation for the major, Africana Studies 327 , and three units selected from each of the three areas of the major.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Courses (AFRAS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

AFRAS 101. Introduction to Africana Studies: Social and Behavioral Sciences (3) [GE-ES]
Interdisciplinary introduction of African American thought and behavior. Subject areas include social systems, economic empowerment, self development, family dynamics, use of power, cognitive styles, interethnic communication and international relations. Review of relevant literature in social and behavioral sciences. (Formerly numbered Africana Studies 101A.)
AFRAS 102. An Afrocentric Response to Generational

## Trauma (3) [GE-ES]

Generational trauma to African Americans resulting from Black Lives Matter movement, Jim Crow, Maafa, and Reconstruction. Physiological, psychological, and social impacts of generational trauma. Wholeness and healing.
AFRAS 120. Composition (3) [GE]
Prerequisite: Satisfaction of the SDSU Written Communication Assessment requirement. (See "Graduation Requirements" section of catalog.) Proof of completion of prerequisite required.

Designed to develop and enhance composition and reading skills. Focus on writing skills that contribute to academic growth and development. Not open to students with credit in a high-er-numbered composition course or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100B or Rhetoric and Writing Studies 100 [or English 100] or 105B.
AFRAS 140. Oral Communication (3) [GE]
Practice in speaking, critical listening, reasoning and organizing. Theory and techniques of communications used to evaluate the effect they have on the lives of Blacks and others. Not open to students with credit in Chicana and Chicano Studies 111A or Communication 103.
AFRAS 170A-170B. Afro-American History (3-3) [GE-AI-ES]
American history from a Black perspective. These courses satisfy the graduation requirement in American Institutions.
AFRAS 200. Intermediate Expository Writing and Research Fundamentals (3) [GE]
Prerequisites: Satisfaction of the SDSU Written Communication Assessment requirement and Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100B or Rhetoric and Writing Studies 100 [or English 100] or 105B. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Development of intermediate expository writing skills and application of practical research principles. Not open to students with credit in American Indian Studies 225, Chicana and Chicano Studies 200, Linguistics 200, or Rhetoric and Writing Studies 200 [or English 200].

## AFRAS 240. Africana Intellectual Thought (3) [GE-ES]

Major theories and theory-makers and production of a global black intellectual tradition. Thoughts and writings of major black leaders as they relate to liberation, struggle, resistance, and cultural production.

## AFRAS 260. Africana Literary Study (3) [GE-ES]

Oral and written literature produced by people of African descent. How Africana people use language to communicate their history and culture. Basic literary vocabulary, techniques, and theories for the non-specialist.

## AFRAS 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

AFRAS 300. Afro-Brazilian Community, Culture, and Identity (3)
Culture, history, and the social institutions of Brazilians of African descent. Economic and political standing in Brazil's contemporary urban and traditional rural societies.

## AFRAS 305W. Writing in Various Settings (3)

Prerequisites: Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a grade of $C(2.0)$ or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Compose effective texts for a wide range of situations in and out of the university. Adjust textual elements for specific audiences, purposes, and settings. Enhance critical reading and writing skills by exploring how content contributes to meaning and effectiveness.

## AFRAS 320. Political Economy of African Diaspora (3) [GE]

Political economy of urban growth, development, and redevelopment in African diaspora, examined in historical and contemporary contexts. Race and class inequality and conflict; effectiveness of public and private sector decisions and programs.
AFRAS 321. Black Political Participation in America (3) [GE]
Afro-American political life and development in the United States. Interaction between Afro-Americans and various actors, institution processes, and policies of the American system of politics and governance.

## AFRAS 322. African American Political Thought (3) [GE]

Political and social thought underlying principles, goals, strategies developed by African Americans in struggle for social development and human rights. Focus on twentieth century thought.
AFRAS 327. Critical Theories in Africana Studies (3) [ES]
Major historical and contemporary theories and thinkers that have defined and continue to define discipline of Africana studies. Comparative analyses of diverse voices and perspectives.

## AFRAS 331. The Black Family (3) [ES]

Structure and functions of the Black family in contemporary American society.
AFRAS 332. Black Women: Myth and Reality (3) [ES]
Images of Black women in America and how those images have been distorted.
AFRAS 341. Cultural Patterns and African American
Identity (3) [GE]
Prerequisite recommended: Africana Studies 101.
Impact of social institutions on African American identity and cultural patterns.

## AFRAS 351. Black Religions and Spirituality (3)

(Same course as Religious Studies 351)
Major Black religious and spiritual responses and expressions in Africa and Black diaspora, including creation of institutions to support and advance religious and spiritual matters.

## AFRAS 363. Sociocultural Analysis of Black Languages (3) [ES]

(Same course as Linguistics 363)
Social and cultural functions of Black languages, verbal and nonverbal, in Afro-American life, and their profound impact on larger society. Also, a probe into issues concerning validity of Black English.
AFRAS 365A. African American Literature to 1900 (3) [GE]
(Same course as English 365A)
Eighteenth and nineteenth century writing by African American authors. Issues of literary form, canon formation, and sociopolitical impact of the literature upon African American culture.

AFRAS 365B. African American Literature After 1900 (3) [GE] (Same course as English 365B)
Writing by African American authors after 1900. Issues of literary form, canon formation and sociopolitical impact of the literature upon African American and American culture of the twentieth and twenty-first centuries.
AFRAS 380. Blacks in the American Justice System (3) [GE]
Interpretation and application of constitutional principles and judicial decisions to political and social problems faced by Afro-Americans.
AFRAS 385. African American Music (3) [GE-ES]
African American music from its African roots to present. Consideration of musical styles, events, significant contributors as well as role of sociocultural values in development of music.
AFRAS 421. Black Urban Experience (3) [GE]
Major social science literature of international Black urban experience. Behavior, culture, and oppressions unique to urban environment.

## AFRAS 422. Modern Civil Rights Movement (3) [ES]

Prerequisite: Africana Studies 101.
Key events, strategies, and theoretical debates that emerged from struggle for black equality during modern civil rights movement in the United States from 1945 to present.
AFRAS 423. Black Nationalism (3) [ES]
Black nationalism in the world, with emphasis on comparative analysis of writings of leading nationalist (and Pan-Africanist) thinkers and theorists.
AFRAS 455. Africana Class, Gender, and Sexualities (3) [GE]
Intersection of race, class, gender, and sexualities within Africana culture and experience and impact on Africana world-view.

## AFRAS 465. Africa in Literature and Film (3) [GE]

(Same course as French 465)
African cultural history through literature and film. Consistency/ variety of African cultural expressions and conventions in literature and film. Taught in English.
AFRAS 466. Afrofuturism (3) [GE-ES]
Interdisciplinary study of African and African American contributions to science fiction, comic book art, pop culture, and its origins and influences.
AFRAS 470. Comparative History: Afro-American and African
Heritage (3) [GE-ES]
Conceptual framework of African history and a comparative study of Afro-American institutions.
AFRAS 471. Africana History (3) [ES]
Major themes in African American historical development as they relate to African survivals in diaspora; growth of free Africana communities; Reconstruction; history of United States social movements; movement leadership and daily life; and concurrent developments in Africa. Not open to students with credit in Africana Studies 471A and 471B.
AFRAS 472. African Enslavement (3) [GE-ES]
Comparative history of enslavement of Africans in the Americas and Muslim world, African servitude, and modern day enslavement.
AFRAS 473. Women in Africa (3) [GE]
Historical and contemporary roles women have occupied in Africa as political leaders, spiritual authoritative figures, and mothers in various African societies; from classical Africa to the present.
AFRAS 476. History and Culture of Hip Hop (3) [ES]
Genesis of hip hop as a worldwide culture, with attention to major Africana historical, political, sociological, cultural, and aesthetic precursors.

AFRAS 485. Blacks in the Arts (3)
Academic and artistic perspectives on Black participation in and contributions to the creative and performing arts. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

## AFRAS 490. Senior Seminar (3)

Prerequisite: Open only to majors who have completed the first semester of junior year.

Capstone experience in which mastery of practice, theories, concepts, and issues central to Africana studies is demonstrated.

## AFRAS 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## AFRAS 499. Special Study (1-3)

Prerequisite: Consent of instructor. Individual study. Maximum credit six units.

# American Indian Studies 

In the College of Arts and Letters

OFFICE: Arts and Letters 331
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WEBSITE: http://ais.sdsu.edu

## Faculty

Emeritus: Kilpatrick, Locklear
Chair: Kamper
Professor: Field
Associate Professor: Kamper
Assistant Professors: Chilcote, Nelson
Lecturers: Carrico, Cornell
Offered by the Department
Major in American Indian studies with the B.A. degree in liberal arts and sciences.
Minor in American Indian studies.

## The Major

A major in American Indian studies provides students with a liberal arts education focused on cultural diversity. The American Indian studies program takes an interdisciplinary approach to the study of Native American peoples. Using literature, art, history, and politics as touchstones, students come to understand the individual, as well as tribal character of Indian people. Special emphasis is given to the tribes of Southern California. Courses also draw comparisons between American Indian life and the life of other members of American society. A degree in American Indian studies prepares students for various careers both in and outside Indian country. Many of our majors find employment with tribal education programs, social and human services programs, and cultural preservation divisions. Employment opportunities are available with the various federal agencies that work with Native American communities, to include the Bureau of Indian Affairs, Indian Health Service, and National Indian Gaming Commission. Majors are qualified to work in a wide range of non-Indian fields that serve Native communities, to include engineering/architectural consulting, entrepreneurship, environmental planning, financial services, and hospitality.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Impacted Program

The American Indian studies major is an impacted program. To be admitted to the American Indian studies major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

American Indian Studies Major<br>With the B.A. Degree in Liberal Arts and Sciences

(Major Code: 22121) (SIMS Code: 110702)
All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in American Indian studies can apply to the degree.

A minor is not required with this major.
Preparation for the Major. American Indian Studies 110; and 140 or 141. (6 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 25 upper division units to include American Indian Studies 420, 485, 498, and 18 units selected from American Indian Studies 300, 320, 331 [or Political Science 331], 370 [or Hospitality and Tourism Management 370], 430, 435, 440, 451 [or Anthropology 451], 460 [or Anthropology 460 or Linguistics 460], 470 [or Religious Studies 470], 480, 499. Courses with American Indian content from other departments may be applied to this major with written consent of the undergraduate adviser.

## American Indian Studies Minor (SIMS Code: 110701)

The minor in American Indian studies consists of a minimum of 18 units, 12 of which must be upper division courses selected from American Indian studies or other appropriate departments (e.g., anthropology, linguistics, political science, Latin American studies) in consultation with the departmental adviser.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Courses (AMIND)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

AMIND 110. American Indian Heritage (3) [GE-ES]
Major American Indian themes, beliefs, and practices and their impact on Western civilization through institutions, art, literature, philosophy, and religion.

## AMIND 120. Written Communication (3) [GE]

Prerequisite: Satisfaction of the SDSU Written Communication Assessment requirement. (See "Graduation Requirements" section of catalog.) Proof of completion of prerequisite required.

Understanding of rhetoric of written argument from interdisciplinary perspectives, with reference to American Indian content. Designed to develop and enhance composition and reading skills. Focus on writing skills that contribute to academic growth and development. Not open to students with credit in a higher-numbered composition course or Africana Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100B or Rhetoric and Writing Studies 100 [or English 100] or 105B.

AMIND 140. U.S. History from an American Indian Perspective to 1870 (3) [GE-AI-ES]
U.S. history from an indigenous perspective pre-Columbian contact to 1870. Examines Native American societies with attention to white intrusion, U.S. constitution and legislation to remove Indians, control of their land and impact upon indigenous culture and society. Satisfies the American Institutions requirement in American history and United States Constitution.
AMIND 141. U.S. History from an American Indian Perspective Since 1870 (3) [GE-AI-ES]
U.S. history from an indigenous perspective from 1870 to the present. Examines Native American societies, political systems, and reservations. Attention given to historical, contemporary, political, socioeconomic issues, the U.S. and California constitutions and their impact on Native Americans. Satisfies the American Institutions requirement in American history and California government.

## AMIND 210. Indigenous Women and the Arts (3) [GE-ES]

How indigenous women have used cultural forms to represent political issues and imagine social possibilities. Cultural forms to include contemporary and traditional material arts, fashion, film, literature, multimedia performance, and music.
AMIND 225. Expository Writing and Research (3) [GE]
Prerequisites: Satisfaction of the SDSU Written Communication Assessment requirement and Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100B or Rhetoric and Writing Studies 100 [or English 100] or 105B. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Intermediate writing development to include rhetoric of spoken, written, and visual texts drawn from interdisciplinary sources. Not open to students with credit in Africana Studies 200, Chicana and Chicano Studies 200, Linguistics 200, or Rhetoric and Writing Studies 200 [or English 200].

## AMIND 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)

## AMIND 300. American Indian Oral Tradition (3) [GE-ES]

Pre-twentieth century American Indian oral and symbolic traditions including creation and origin legends, coyote stories, ceremonial songs, oratory, and memoirs.

## AMIND 320. American Indians in Contemporary Society (3)

 [GE-ES]Sociological understanding of the American Indian groups in contemporary society with emphasis on the relationship to dominant society and why the focus has been on Indians as social problems.
AMIND 331. The American Indian Political Experience (3) [ES]
(Same course as Political Science 331)
Prerequisite: American Indian Studies 110 or Political Science 102.

Social and political responses to dominant group policies by American Indian as compared to other minority groups.
AMIND 370. Tribal Gaming: Cultural and Political Context (3) [ES] (Same course as Hospitality and Tourism Management 370) Prerequisite: Upper division standing.
Social and political context of American Indian tribal gaming, political relationships between federal and tribal governments, contemporary examples of tribal gaming, sociocultural and economic forces leading to gaming as strategy for economic development, and responses by non-Indian communities to tribal gaming.
AMIND 420. Indian Peoples of California (3) [GE-ES]
Indian peoples of California. Their histories and cultures from oral traditions to contemporary issues. Focus on selected Indian tribes and communities.

## AMIND 430. American Indian Poetry and Fiction (3) [GE-ES]

Contemporary American Indian poetry and fiction explored in works of Welch, Ortiz, Momaday, Silko, Deloria, Allen, Erdrich, and others.
AMIND 435. Indians Through Film and Television (3) [GE-ES]
Ethnographic film-making. Impact of movies and television on popular concepts of Indians. Films viewed in class.
AMIND 440. American Indian History (3) [GE-ES]
Historical analysis of Indian-White contact. Emphasis on the impact of historical events upon the various cultures.
AMIND 451. American Indian Identity (3) [GE-ES]
(Same course as Anthropology 451)
Multidisciplinary perspectives on American Indian identity today. Topics include perspectives from political, ethnic, cultural and legal standpoints, both within and outside of indigenous communities, as well as diachronic variation in perspectives.
AMIND 460. American Indian Languages (3) [GE-ES]
(Same course as Anthropology 460 and Linguistics 460)
Structures of American Indian languages. Language families of North America, history, and present circumstances. Interdependence of language and culture, differences in ways of speaking. Issues of language endangerment, language death, language maintenance, and language revitalization.
AMIND 470. American Indian Spirituality and
Epistemologies (3) [GE]
(Same course as Religious Studies 470)
Spirits, prophesies, and renewals of the Indian way compared through symbols and ceremony. Religions surveyed as they have been influenced by foreign elements and philosophies. Influences on values and tribalism as reflected through symbols and other measures.
AMIND 480. Issues in American Indian Education (3) [GE-ES]
Prerequisite: American Indian Studies 110.
Cross-cultural differences in learning styles, emphasis on Native American styles. Cross-cultural differences in child socialization related to readiness for school. Literacy-related practices in oral communities. Bilingual education in Native American communities. Local educational empowerment.
AMIND 485. Federal Indian Law (3) [ES]
Prerequisite: American Indian Studies 110, 140, or 141.
Legal relationship between the United States and Indian people and Indian tribes as field of Indian law was developed and has changed over the years until the present.
AMIND 496. Topics in American Indian Studies (1-3)
An undergraduate seminar. See Class Schedule for specific content. Maximum credit six units. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## AMIND 498. American Indian Community Service

 Experience (1) $\mathrm{Cr} / \mathrm{NC}$Service learning experience in local American Indian community, mentoring, tutoring, or interning at Indian Education Center, Indian Health Center, or similar experience. Minimum of 35 contact hours. Service experience coordinated by supervising American Indian studies faculty with target community organization.
AMIND 499. Special Study (1-4)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

# Anthropology 

OFFICE: Arts and Letters 448
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Faculty
Emeritus: Ball, Conway, Gamble, Greenfeld, Henry, Himes, Leach, Lippold, Moore, Pendleton, Rohrl, Rollefson, Watson, Whitney Chair: Sobo
Professors: Braje, Lauer, Mallios, Pérez, Riley, Sobo
Associate Professors: Mayes, Robb Larkins, Ullah
Assistant Professors: Mathwich, Roulette

## Offered by the Department

Master of Arts degree in anthropology.
Major in anthropology with the B.A. degree
in liberal arts and sciences.
Minor in anthropology.

## The Major

Anthropologists study the biological characteristics, evolutionary history, geographic distribution, environmental adaptations, linguistic practices, social relationships, institutions, customs, knowledge, myths, and cultural processes of human populations.

The anthropology major provides a broad background for the various specialized areas in the field: (a) archaeology, the analysis of past cultures through a focus on material remains or artifacts; (b) socio-cultural anthropology, the study of socio-cultural processes and diversity; (c) linguistic anthropology, the analysis of cultural differences in communication; and (d) biological anthropology, the study of past and present human and primate populations.

Employment opportunities for anthropology graduates include academic research and teaching as well as nonacademic or applied careers, for example in nonprofit associations, federal, state, local government, and international agencies; in health care, business, and manufacturing organizations; at research institutes; at zoos or wildlife preserves; on environmental projects, doing human-impact assessment or resource management; and in museums.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser during the first semester after declaration or change of major.

## Impacted Program

The anthropology major is an impacted program. To be admitted to the anthropology major, students must meet the following criteria:
a. Complete with a grade of $C(2.0)$ or better: Anthropology 101, 102, and 103. These courses cannot be taken for credit/ no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Anthropology Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 22021) (SIMS Code: 110901)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in anthropology courses can apply to the degree.

A minor is not required with this major.
Preparation for the Major. Anthropology 101, 102, and 103. (9 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$. The minimum grade in each class is $C$ (2.0) or better.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirements. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Graduation Survey. All majors will complete an online survey assessing their experiences in the department and educational outcomes in the major. Students answer the survey online at the Department of Anthropology webpage. The survey must be completed during the student's final semester.

Major. A minimum of 36 upper division units, at least 33 of which are in anthropology, to include Anthropology 301, 302, 303, 304 , one course may be substituted with another upper division anthropology course with consent of the department; six units selected from the following "methods" courses: Anthropology $312,348,355,360,495,505,520,531,532,560,561 ; 499$ and 583 with consent of the department; and 18 additional upper division units, at least 15 of which are in anthropology, one course of the 18 additional upper division units may be selected from one of the following courses: American Indian Studies 420, Biology 315, Chicana and Chicano Studies 301, Geography 312, History 406, 441, Philosophy 330, 332 [or Sustainability 332], Political Science 435, Religious Studies 376, Sociology 320, 355, Women's Studies 310, 382.

## Anthropology Minor

## (SIMS Code: 110901)

The minor in anthropology consists of a minimum of 18 units in anthropology to include two courses selected from Anthropology 101,102 , or 103 , and 12 upper division units in anthropology.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Courses (ANTH)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

## ANTH 101. Human Biocultural Origins (3) [GE]

Humankind's place in nature; fossil evidence for hominid evolution; evolutionary theory; racial, clinal and genetic variability; relationship of physical and cultural adaptations; the rise of civilization.
ANTH 102. Introduction to Socio-Cultural Anthropology (3) [GE]
Cross-cultural survey of systems of social, political, and economic organization, language, gender, kinship, religion, and subsistence; culture change and intercultural connections; ethnographic field methods and theories of culture; contemporary applications.

## ANTH 103. Introduction to Archaeology and World <br> Prehistory (3) [GE]

Archaeology emphasizing the modern relevance of understanding the past. Beginning six to seven million years ago in Africa, highlighting the physical and cultural evolution of our human lineage.

## ANTH 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)

## ANTH 301. Principles of Biological Anthropology (3)

Two lectures and three hours of laboratory.
Prerequisite: Anthropology 101.
Theory and method in biological anthropology. Hands-on collection and interpretation of data in primate comparative anatomy, human evolution, human skeletal biology, human adaptability, and primate behavioral observation.

## ANTH 302. Principles of Archaeology (3)

Two lectures and three hours of laboratory.
Prerequisite: Anthropology 103.
History, method, and theory of archaeological data acquisition and interpretation. Methods of data recovery and analysis suitable to resolution of historical and processual questions. Archaeological examples from a worldwide sample of prehistoric and historic societies.

## ANTH 303. Principles of Socio-Cultural Anthropology (3)

Prerequisite: Anthropology 102.
Development of theories which explain nature of culture and cultural variation. Applications of theory of culture to field methods in ethnography and interpretation of ethnographic findings.

## ANTH 304. Principles of Anthropological Linguistics (3)

Prerequisite: Anthropology 102.
Structural nature of language. How languages differ, change and influence each other. Language families of the world. Significance of language for human social life in a variety of cultures.

## ANTH 312. Archaeological Field Techniques (3)

Six hours of activity.
Prerequisite: Anthropology 302.
Archaeological excavation of significant sites in San Diego. Techniques of excavation, recording, and surveying.
ANTH 333. Race, Ethnicity, and Identity in the Americas (3) [GE] (Same course as Latin American Studies 333)
Prerequisite: Anthropology 102 or Latin American Studies 101.
History and contemporary forms of identity to include ethnicity, gender, nationality, race, and sexuality in Canada, Latin America, and United States.
ANTH 348. Historical Archaeology (3) [GE]
Prerequisite: Anthropology 102.
How historical texts and archaeological artifacts are used to understand colonial expansion and indigenous response across the globe over last half millennium. Incorporates native and European worldviews in investigation of archaeological sites from historical times.

## ANTH 349. Roots of Civilizations (3) [GE]

Prerequisite: Upper division standing.
Origins and major attributes common to civilizations. Form and function of fundamental characteristics in different civilizations. Examples taken from Africa, Asia, the Near East and the New World.
ANTH 350. Cultures Around the Globe (3) [GE]
Prerequisite: Anthropology 102.
Cultural patterns of representative peoples. Industries, arts, social organization and supernaturalism considered with view to environmental adjustment, historical development and functional interrelation. Ethnological theories reviewed and applied in interpreting illustrative societies.

## ANTH 353. Sustainability and Culture (3) [GE]

(Same course as Sustainability 353)
Examination of efforts of anthropology to understand sustainability and provide solutions to human-environmental problems. Compares and explores sustainability in a variety of contexts and scales, from San Diego region to diverse communities around the world.

## ANTH 355. Exploring Primate Behavior (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A. Natural Sciences and Quantitative Reasoning. If a biological sciences course is not taken to satisfy Foundations of Learning II.A. 2. Life Sciences, a college course in biological sciences is required.

World of our closest living relatives. What it means to be a primate, where primates live, how primates have evolved into different groups and adapted to different environments, and what primates are threatened with extinction and why.

## ANTH 360. From the Grave: Modern Forensic Anthropology (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A. 2. Life Sciences. If a biological sciences course is not taken to satisfy Foundations of Learning II.A. 2. Life Sciences, a college course in biological sciences is required.

Physical anthropology and skeletal biology within medicolegal context. Methodologies used in science of forensic anthropology, as interdisciplinary nature and authorities in related fields.
ANTH 402. Dynamics of Biocultural Diversity (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A.2. Life Sciences. If a biological sciences course is not taken to satisfy Foundations of Learning II.A.2. Life Sciences, a college course in biological sciences is required.

Interaction of biology and culture in human populations. Relating genetic and cultural processes to the changes in human populations over time.
ANTH 404. Evolution of Human Behavior (3) [GE]
Prerequisite: Anthropology 101 or Biology 101.
Evolutionary approaches to human behavior to include evolutionary psychology, gene-culture coevolution, and human behavioral ecology. Evolution of cooperation and altruism, human health and survival, human mating, parenting, and violence and warfare.

## ANTH 410. Language in Culture (3) [GE]

Prerequisite: Anthropology 102.
Survey of anthropological interests in the study of language and of linguistic interests in the sociocultural context of language.
ANTH 422. Music and Culture (3) [GE]
Prerequisite: Anthropology 102.
How the forms, functions and meanings of music vary crossculturally. Understanding a society's music historically, holistically and experientially, with emphasis on non-Western music. Universals of music and music use. Ethnological theories of music and music change.

## ANTH 424. The Supernatural in Cross-Cultural

Perspective (3) [GE]
(Same course as Religious Studies 424)
Prerequisite: Anthropology 102.
Magic and religion. Conceptions of the supernatural in a cross section of world's cultures. Anthropological theories relating to supernatural beliefs and practices.

## ANTH 439. Cultural Comparisons Through Film (3) [GE]

Principles of cultural anthropology to include signs and proxemics, cultural prerequisites, kinship and social organization, and law and values. Feature and documentary films.

## ANTH 440. Mesoamerican Civilization Before the

Europeans (3) [GE]
Prerequisite: Anthropology 102.
Pre-European cultures and civilizations of Mexico and upper Central America from 25,000 years ago to arrival of Spanish in 1517. Regional histories, economies, social organizations, ideologies, and political systems, settlement patterns, architecture, and art.

## ANTH 442. Cultures of South America (3) [GE]

Prerequisite: Anthropology 102.
Indian cultures in terms of origins, migration, relation to habitat, cultural variation and relevance to contemporary trends. Development of Inca civilization, the effects of the Spanish conquest and its aftermath.

## ANTH 443. Anthropology of Violence (3)

Prerequisite: Anthropology 102.
Individual and collective acts of armed violence in variety of historical and cultural settings. Structural violence with attention to how poverty and inequality are related to violence and suffering. Warfare and aggression on the part of colonial powers and the modern state.

## ANTH 445. Culture, Gender, and Race in Sports (3)

Prerequisite: Anthropology 102.
Intersection of culture, gender, and race through sports in Europe, Latin America, and North America at amateur, communi-ty-based, and professional levels. Consideration of sports' participation and fandom and how gender, nationality, and race affect those processes.
ANTH 451. American Indian Identity (3) [GE-ES]
(Same course as American Indian Studies 451)
Multidisciplinary perspectives on American Indian identity today. Topics include perspectives from political, ethnic, cultural and legal standpoints, both within and outside of indigenous communities, as well as diachronic variation in perspectives.
ANTH 460. American Indian Languages (3) [GE-ES]
(Same course as American Indian Studies 460

## and Linguistics 460)

Structures of American Indian languages. Language families of North America, history, and present circumstances. Interdependence of language and culture, differences in ways of speaking. Issues of language endangerment, language death, language maintenance, and language revitalization.

## ANTH 471. Archaeology of North America (3)

Prerequisite: Anthropology 101 or 102.
Origins of the American Indian and survey of the main prehistoric cultures of the North American continent.

## ANTH 483. Topics in Anthropology (3)

Prerequisites: Anthropology 101 or 102 and upper division standing.

Archeological, biological, linguistic, or sociocultural dimensions of anthropology. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.
ANTH 495. Internship in Applied Anthropology (1-3) Cr/NC
Prerequisites: Anthropology 301, 302, 303, 304.
Supervised field placement of students in campus or community organization, museums, cultural resource management firms, social service and development agencies, forensic laboratories and other offices including business firms where concepts and principles of anthropology can be put into practice. May be repeated for maximum credit three units.

## ANTH 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## ANTH 499. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

## ANTH 501. Primate Behavioral Ecology (3)

Prerequisite: Anthropology 301.
Ecology and behavior of nonhuman primates to include history of primate ecological research, feeding ecology, predation, demography and dispersal, reproduction, conflict and cooperation, conservation as well as contemporary primatology.
ANTH 505. Human Osteology (3)
Two lectures and three hours of laboratory.
Prerequisite: Anthropology 301.
Identification of individual bones and teeth; sex, age, and racial variation; stature reconstruction; continuous and discontinuous morphological variations; paleopathology. Training in observations, measurements, and analyses.

## ANTH 508. Medical Anthropology (3)

Prerequisite: Anthropology 303.
Socio-cultural ecology of disease, medical health beliefs and practices in cultural context, and complexities of health care delivery in pluralistic societies.
ANTH 510. Environmental and Ecological Anthropology (3)
Prerequisite: Anthropology 303.
Ecological thinking in anthropology with focus on relationships between human environmental and ecological systems in tribal, peasant, and industrial societies. Cultural aspects of how and why human societies have maintained or undermined their ecosystems.
ANTH 520. Ethnographic Field Methods (3)
Prerequisite: Anthropology 303.
Problems and techniques of field work in ethnographic and social anthropological research; field work projects conducted using various qualitative and quantitative research techniques. Students work with informants in various settings.

## ANTH 529. Urban Anthropology (3)

Prerequisite: Anthropology 303.
Urban adaptations of past and present societies. Descriptive topics and applied concerns regarding urban origins, migrations, kinship, ethnicity, stratification, and change. Ethnographic examples drawn from Western and non-Western societies.

## ANTH 531. Methods in Applied Anthropology (3)

Prerequisite: Anthropology 303.
Anthropological concepts and methodologies to solve human problems in both western and non-western societies through intervention, community development, impact assessment, and cultural communication.
ANTH 532. Anthropology of Development and Conservation (3) Prerequisite: Anthropology 303.
Anthropological perspectives on design, implementation, and assessment of development projects and conservation initiatives in "Third World." Interlinkages between resource exploitation, underdevelopment, and local autonomy; and political and ethical dilemmas faced by anthropologists involved in projects.

## ANTH 533. Race, Ethnicity, and Identity (3)

Prerequisite: Anthropology 303.
Theories and practices of race, ethnicity, and identity from a cross-cultural and anthropological perspective. History of race in US and other regions, focusing on how identities are constructed around concepts of difference.

## ANTH 536. Gender and Human Sexuality (3)

Prerequisite: Anthropology 303.
Constructions of gender and sexuality from anthropological perspective. Social constructions of body, norms, deviance, and medicalization of sexuality.

## ANTH 537. Anthropology of Childhood (3)

Prerequisite: Anthropology 303.
Childhood in diverse cultural settings; evolutionary, biosocial, and health-related aspects of childhood; social and cultural uses of idea of childhood; enculturation and children's relationship to material culture.

## ANTH 560. Advanced Archaeological Field Techniques (3)

Six hours of activity.
Prerequisite: Anthropology 312.
Advanced projects in excavation and stabilization of ruins, archaeological surveys, laboratory analysis, preparation of reports, and act as unit supervisor. Course may be repeated with consent of instructor. Maximum credit six units.

## ANTH 561. Archaeological Laboratory Methods (3)

Two lectures and three hours of laboratory.
Prerequisite: Anthropology 302.
Application of palynology, paleontology, and relevant technologies. Individual laboratory research project required.

## ANTH 562. Computational Archaeology (3)

Two lectures and three hours of laboratory.
Prerequisite: Anthropology 302 or graduate standing.
Computational spatial research in anthropology and archaeology to include applications of computer modeling, digital imagery analysis, and geographic information systems.

## ANTH 563. Anthropogenic Landscapes (3)

Two lectures and two hours of activity.
Prerequisite: Anthropology 302.
Human activity that has shaped the Earth's surface over time. Past human impacts to include geo-archaeology and laboratory analyses of anthropogenic sediments.

## ANTH 582. Regional Anthropology (3)

Prerequisite: Consent of instructor.
Study of societies in a major geographical region of the world such as Africa, the Arctic, East Asia, Europe, Latin America, the Middle East, North America, Oceania, or South Asia. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

## ANTH 583. Topical Anthropology (3)

Prerequisite: Consent of instructor.
Study of a major subdiscipline such as political anthropology, economic anthropology, social anthropology, psychological anthropology, cultural ecology, applied anthropology, anthropological genetics, or environmental archaeology. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

## ANTH 596. Topics in Anthropology (1-3)

Prerequisite: Consent of instructor.
Advanced topics in anthropology. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

## Refer to the Graduate Bulletin.

OFFICE: Storm Hall West 214
TELEPHONE: 619-594-5268 / FAX: 619-594-4877
WEBSITE: http://arabic.sdsu.edu

## Faculty

Emeritus: Osman
Chair: Samraj
Assistant Professor: Soulaimani
Lecturers: El Cheddadi, Zakaria
Administered by the Center for Islamic and Arabic Studies
Major in Islamic and Arabic studies.
Minor in Islamic and Arabic studies.

## Offered by International Business

Major in international business, with emphasis in Arabic.

## The Major

The Islamic and Arabic studies major is a multidisciplinary program that is designed to enable students to achieve fuller understanding and deeper insight and appreciation of non-western cultures. Students who specialize in Islamic studies choose from specific courses in Arabic, history, political science, religious studies, and women's studies. Students who wish to specialize in Arabic studies must also choose from specific courses in Arabic, history, political science, religious studies, and women's studies as indicated.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Impacted Program

The Islamic and Arabic studies major is an impacted program. To be admitted to the Islamic and Arabic studies major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Islamic and Arabic Studies Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 15103) (SIMS Code: 115103)
The adviser for this major is Dr. Hisham S. Foad, Department of Economics.

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A minor is not required with this major.
Preparation for the Major. Students must select either the Arabic studies or Islamic studies specialization to complete preparation for the major.

Arabic studies: Arabic 101, 102, 201, 202, History 101, Political Science 103, Religious Studies 101. (25 units)

Is/amic studies: Arabic 101, 102, 201, History 100, 101, Political Science 103, Religious Studies 101. (24 units)

Language Requirement. The language requirement for graduation is automatically fulfilled through coursework for preparation for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. Students must select either the Arabic studies or Islamic studies specialization to complete the major.

Arabic studies: A minimum of 29 units to include Arabic 301, 302, 330, History 473, 474, Political Science 363, Women's Studies 560, and six to seven units selected from Arabic 350, Economics 466, History 574, Political Science 562, Religious Studies 310, 328, 379, Women's Studies 331.

Islamic studies: A minimum of 30 units to include History 473, 474, Political Science 363, 562, Religious Studies 310, 328, Women's Studies 560, and nine units selected from Arabic 330, Economics 466, History 574, Religious Studies 379, Women's Studies 331.

Up to six units (with appropriate content) can be applied to either the Arabic studies or Islamic studies specialization from Arabic, History, Political Science, Religious Studies 496, 499, or 596.

## Islamic and Arabic Studies Minor <br> (Minor Code: 22159) (SIMS Code: 115102)

The adviser for this minor is Dr. Hisham S. Foad, Department of Economics.

Offered by the Center for Islamic and Arabic Studies, the minor in Islamic and Arabic studies consists of a minimum of 18 units, 12 of which must be upper division, to include Political Science 363; Religious Studies 328*; six units from History 473, 474, 574; and three units of lower division religious studies. Three additional units may be selected from Arabic 101, 102, 201, 202, 330; History 473, 474, 574.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.
*Additional prerequisites required.

## Language Requirement for the

## B.A. Degree in Liberal Arts and Sciences

Students electing the study of Arabic to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Arabic 201 or the equivalent level of achievement. The usual sequence of coursework is Arabic 101, 102, 201, and 202. Refer to section of catalog on "Graduation Requirements" for additional ways to satisfy competency.

## High School Equivalents

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:

1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters, thus fulfilling the language requirement.

## Courses (ARAB)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

Native speakers of Arabic will not receive credit for taking lower division courses in Arabic except with advance approval from the department.

No credit will be given for lower division courses taken after successfully completing any upper division Arabic course taken in Arabic.

No credit will be given for Arabic 101, 102, 201, 202 taken out of sequence.

## ARAB 101. Elementary Arabic I (4) [GE]

Four lectures plus laboratory.
Introduction to Arabic, with emphasis on language of everyday conversation. Focus on vocabulary and structures needed for elementary speaking, listening, and reading. Not open to students with credit in Arabic 102, 201, or 202.

## ARAB 102. Elementary Arabic II (4) [GE]

Four lectures plus laboratory.
Prerequisite: Arabic 101 or two years of high school Arabic.
Continuation of Arabic 101. Develops vocabulary and structures needed for elementary speaking, listening, and reading, with emphasis on the language of everyday conversation. Not open to students with credit in Arabic 201 or 202.
ARAB 201. Intermediate Arabic I (4) [GE]
Four lectures plus laboratory.
Prerequisite: Arabic 102.
Further development of speaking, listening, reading, and writing skills, with emphasis on the language of everyday conversation. Not open to students with credit in Arabic 202.

## ARAB 202. Intermediate Arabic II (4) [GE]

Four lectures plus laboratory.
Prerequisite: Arabic 201.
Further development of speaking, listening, reading, and writing skills, with emphasis on the language of everyday conversation.

## ARAB 296. Topics in Arabic Studies (1-4)

Topics in Arabic language, culture, and linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

All upper division courses in Arabic are taught in Arabic unless otherwise stated.

No credit will be given for Arabic 301, 302 taken out of sequence.
ARAB 301. Advanced Arabic I (4) [GE]
Four lectures plus laboratory.
Prerequisite: Arabic 202.
Advanced facility in oral expression and writing for practical purposes; exposure to various dialects through newspaper and media Arabic; elements of literary and classical language.

## ARAB 302. Advanced Arabic II (4) [GE]

Four lectures plus laboratory.
Prerequisite: Arabic 301.
Continuation of Arabic 301. More advanced writing and longer expository texts. Reading modern and classical texts.
ARAB 330. Arabic Culture (3) [GE]
Prerequisite: Upper division standing.
Cultures of Arabic speaking peoples of the Near East, Middle East, and North Africa, as reflected in literature, the arts, history, political and social institutions. Taught in English.
ARAB 350. Advanced Conversational Arabic (4) [GE]
Four lectures plus laboratory.
Prerequisite: Arabic 202.
Study of one or more spoken varieties of Arabic, with emphasis on advanced conversational proficiency. Social and cultural topics, conversational strategies and stylistic features. May be repeated with new content. Maximum credit eight units.
ARAB 360. Advanced Arabic Grammar (3) [GE]
Prerequisite: Arabic 202.
Arabic grammar and grammatical relations, parts of speech, and cases. Word, sentence, and discourse structure. Comparison between Modern Standard Arabic and spoken Arabic.
ARAB 496. Topics in Arabic Studies (1-4)
Topics in Arabic language, literature, culture, and linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit eight units.
ARAB 499. Special Study (1-3)
Prerequisite: Consent of instructor. Individual study. Maximum credit six units.

## OFFICE: Art 505

TELEPHONE: 619-594-6511 / FAX: 619-594-1217
E-MAIL: artinfo@sdsu.edu
WEBSITE: http://art.sdsu.edu
Accredited by the National Association of Schools of Art and Design.

Accredited by the Council for Interior Design Accreditation.
For purposes of exhibition and reference, the school reserves the right to retain for a limited period some of each student's work produced in class.

The School of Art and Design is an impacted program. Therefore, students may enroll in art courses only to the maximum units allowed for credit towards graduation. Students enrolling in a course beyond the maximum allowable units will be disenrolled.

## Faculty

Emeritus: Berelowitz, Berg, Burkett, Cooling, Couttolenc, Dominguez, Dumlao, Fisch, Hayakawa, Hunter, Johnson, Maruyama, Merritt, Miller, Moaney, Nakamura, Nelson, Ollman, Orth, Perczel, Ray, Rigby, Roberts-Fields, Rogers, Shirk, Wallace
Director: Buckley
Professors: Buckley, Stringfellow, Yapelli
Associate Professors: Hebert, Keely, Ozkal, Sherman, Siprut, Struble
Assistant Professors: Castro Arias, Higgins, Manley, Quick, Satoh
Lecturers: Benzel, Carlson, Choi, Fobes, Hewitt, Kwon, Luera, Matzigkeit, Palese, Prior, Shigley, Weeks, Williams, Winchell, Woods, Wyss
Offered by the School of Art and Design
Master of Arts degree in art.
Master of Fine Arts degree in art.
Major in art with the B.A. degree in liberal arts and sciences.
Emphasis in art history.
Emphasis in studio arts.
Major in art with the B.A. degree in applied arts and sciences.
Emphasis in applied design.
Emphasis in graphic design.
Emphasis in interior architecture.
Emphasis in multimedia.
Emphasis in painting and printmaking.
Emphasis in sculpture.
Teaching major in art in preparation for the single subject teaching credential.
Minor in art.
Minor in art history.

## The Major

A significant concern of the School of Art and Design is the creative growth of its students. The school focuses on the development of sound undergraduate programs which provide a strong basic foundation in art. A major in art may be planned with an emphasis in applied design, with specialties in ceramics, furniture/woodworking, and jewelry/metalwork; art history; studio arts; graphic design; interior architecture; multimedia; painting and printmaking; and sculpture. A broad spectrum of courses for both majors and nonmajors in art history, art appreciation, basic drawing and design is also available.

All emphases require a set of core courses consisting of courses in drawing, design, and the survey of art history of the Western world. It is strongly recommended that all students complete the core requirements during their freshman year, or at least prior to taking beginning coursework in a specific program emphasis. It is recommended that students take courses from other emphases in order to enhance their overall art experience. In addition to the undergraduate degree, the school offers a Master of Arts degree ( 30 units) in all of these emphases and a Master of Fine Arts degree ( 60 units).

Although a degree in art is often pursued as a means of self-fulfillment and creative growth, graduates of the school are employed in a variety of settings. The programs in graphic design, multimedia, and interior architecture have a preprofessional orientation supplemented by a strong liberal arts background. Interior architecture can lead to interior, architectural, landscape design or city planning. Graphic design can lead to magazine and book design; corporate design; branding; design for film, television, and the recording industry; information design; environmental graphic design; packaging; advertising; interface design for kiosks and the Internet; and type design. Multimedia prepares students in the areas of interactive and timebased media, such as animation, book arts, gaming, instructional systems, motion graphics, net art, photography, publishing, video and film, and web design. The areas of painting, printmaking, and sculpture prepare students for professional attitudes toward the fine arts and the continuance of their educational experience in graduate schools with the goal of teaching at institutions of higher learning. The applied design program can be developed to specialize in ceramics, furniture design/woodworking, and jewelry/metalwork, leading to design positions for industry in a variety of three-dimensional products, prop technicians for theatre and film, as well as independent entrepreneurial ventures in custom designed products.

## Impacted Programs

Emphases in the School of Art and Design are impacted. Students must enter the university under the designated major code for selected programs. To be admitted to the selected program, refer to the program description for specific impacted criteria.

Major Academic Plans (MAPs)
Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Art Major

With the B.A. Degree in Liberal Arts and Sciences
All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in art courses can apply to the degree for students with an emphasis in art history. For students majoring in art with an emphasis in studio arts no more than 57 units in art courses can apply to the degree.

This major in art may be planned with an emphasis in studio arts or art history.

A minor is not required with this major.

## Emphasis in Art History <br> (Major Code: 10031) (SIMS Code: 660517)

Impacted Program. The art history emphasis is designated as an impacted program and specific criteria, which include a portion of the Preparation for the Major, are used to admit students. To be admitted to the art history emphasis, students must meet the following criteria:
a. Complete with a grade of C (2.0) or better: Art 100, 101, 258, and 259. These courses cannot be taken for credit/ no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Have a cumulative GPA of 2.20 or better;
c. Students not meeting the minimum GPA may petition for special consideration.
To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major. Art 100, 101, 258, 259, 263, and three units of art electives. Art 100, 101, 258, and 259 must be completed with a grade of $C(2.0)$ or better and cannot be taken for credit/no credit (Cr/NC). (18 units)

Students completing the California Community College Associate in Arts in Art History for Transfer (AA-T) will satisfy preparation for the major. If Art 101 was not completed as part of the AA-T, it must be completed at SDSU.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. French or German is recommended for those students who plan to pursue graduate study in art history. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International or Professional Experience Requirement. Completion of a study abroad or international experience selected from an SDSU study abroad approved program; or an approved art internship experience by successfully completing Art 452.

Major. A minimum of 30 upper division units in art history to include Art 578 and 593; and 21 units selected from Art 371, 409, 557 through 577 (three of the units must be from Art 557, 559, or 560), and three units of art electives.

## Emphasis in Studio Arts

(Major Code: 10021) (SIMS Code: 660589)
Impacted Program. The studio arts emphasis is designated as an impacted program and specific criteria, which include a portion of the Preparation for the Major, are used to admit students. To be admitted to the studio arts emphasis, students must meet the following criteria:
a. Complete with a grade of C (2.0) or better: Art 100, 101, 102 or $104,103,258$, and 259 . These courses cannot be taken for credit/no credit (Cr/NC);
b. Have a cumulative GPA of 2.20 or better;
c. Students not meeting the minimum GPA may petition for special consideration.
To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major. Art 100, 101, 102 or 104, 103, 258, 259; six units selected from Art 203 or 204, 216, 223, 226, 231, 240 or 248 ; and three units of art electives. Art 100, 101, 102 or 104, 103,258 , and 259 must be completed with a grade of $C(2.0)$ or better and cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). ( 27 units)

Students completing the California Community College Associate in Arts in Studio Arts for Transfer (AA-T) will satisfy preparation for the major. If Art 102 or 104 was not completed as part of the AA-T, it must be completed at SDSU.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International or Professional Experience Requirement. Completion of a study abroad or international experience selected from an SDSU study abroad approved program; or an approved art internship experience by successfully completing Art 452.

Major. A minimum of 30 upper division units in art to include six units selected from Art 340, 343, 344, 346, 348, 403, 404, 407, 410; three units selected from Art 323, 325, 331; six units selected from Art 326, 416, 423, 425, 431, 432, 440, 443, 444, 446, 448; three units selected from Art 345, 347, 412, 506; six units of Art History (Art 371, 409, 557 through 578, and 593); and six units of art electives.

## Art Major

With the B.A. Degree in Applied Arts and Sciences
(Major Code: 10021) (SIMS Code: 660501)
All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A minor is not required with this major.

## Emphasis in Applied Design

(Major Code: 10021) (SIMS Code: 660509)
Impacted Program. The applied design emphasis is designated as an impacted program and specific criteria, which include a portion of the Preparation for the Major, are used to admit students. To be admitted to the applied design emphasis, students must meet the following criteria:
a. Complete with a grade of C (2.0) or better: Art 100, 101, 102 or $104,103,258$, and 259 . These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Have a cumulative GPA of 2.20 or better;
c. Students not meeting the minimum GPA may petition for special consideration.
To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major. Art 100, 101, 102 or 104, 103, 258, 259; six units selected from Art 216, 220, 223, 226, 231; three units selected from Art 148, 204, 210, 240, 241, 242, or 248 ; and three units of art electives. Art 100, 101, 102 or 104, 103, 258, and 259 must be completed with a grade of $C(2.0)$ or better and cannot be taken for credit/no credit (Cr/NC). (30 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 30 upper division units in art to include three units from each of the areas listed below, nine additional units in one of the areas; six units of art electives; and six units of art history (Art 371, 409, 557 through 578, and 593).
Clay: Art 325, 326, 425, 525, 526
Metal: Art 331, 431, 432, 531, 532
Wood: Art 323, 423, 523, 524

## Emphasis in Graphic Design

## (Major Code: 10091) (SIMS Code: 660557)

Impacted Program. The graphic design emphasis is designated as an impacted program and specific criteria, which include a portion of the Preparation for the Major, are used to admit students. To be admitted to the graphic design emphasis, students must meet the following criteria:
a. Complete with a grade of C (2.0) or better: Art 100, 101, 102 or $104,103,258$, and 259 . These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Have a cumulative GPA of 2.50 or better;
c. Students not meeting the minimum GPA may petition for special consideration.
To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major. Art 100, 101, 102 or 104, 103, 241, 242, 258, 259; three units selected from Art 216, 220, 223, 226, 231, and three units of art electives (Art 240 recommended), excluding Art 157. Art 100, 101, 102 or 104, 103, 258, and 259 must be completed with a grade of $C(2.0)$ or better and cannot be taken for credit/no credit (Cr/NC). (30 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 33 upper division units in art to include Art 341, 342A, 345; six units selected from Art 313, 342B, 344, 441, 442, 450; six units selected from Art 445B, 445C, 454, 541, 542, 545; six units of upper division art electives, excluding Art 357; six units of art history (Art 371, 409, 557 through 578, and 593); recommended: Art 577.

## Emphasis in Interior Architecture

## (Major Code: 02031) (SIMS Code: 660566)

Impacted Program. The interior architecture emphasis is designated as an impacted program and specific criteria, which include a portion of the Preparation for the Major, are used to admit students. To be admitted to the interior architecture emphasis, students must meet the following criteria:
a. Complete with a grade of C (2.0) or better: Art 100, 101, 102 or $104,103,258$, and 259 . These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Have a cumulative GPA of 2.20 or better;
c. Students not meeting the minimum GPA may petition for special consideration.
To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major. Art 100, 101, 102 or 104, 103, 148, 249, 250, 251, 258, 259; and three units selected from Art 216, $220,223,226,231$. Art 100, 101, 102 or 104, 103, 258, and 259 must be completed with a grade of $C(2.0)$ or better and cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). (33 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 30 upper division units in art to include Art 347, 352, 451, 453, 552, 553; six units of upper division art electives; and six units of art history (Art 371, 409, 557 through 578, and 593); recommended: Art 577.

## Emphasis in Multimedia

(Major Code: 06991) (SIMS Code: 660562)
Impacted Program. The multimedia emphasis is designated as an impacted program and specific criteria, which include a portion of the Preparation for the Major, are used to admit students. To be admitted to the multimedia emphasis, students must meet the following criteria:
a. Complete with a grade of C (2.0) or better: Art 100, 101, 102 or $104,103,258$, and 259 . These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Have a cumulative GPA of 2.20 or better;
c. Students not meeting the minimum GPA may petition for special consideration.
To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major. Art 100, 101, 102 or 104, 103, 107 or 242, 240, 258, 259; three units selected from Art 216, 220, 223, 226, 231; and three units of art electives, excluding Art 157. Art $100,101,102$ or $104,103,258$, and 259 must be completed with a grade of C (2.0) or better and cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). (30 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 30 upper division units in art to include Art 340 and 344; six units of art history (Art 371, 409, 557 through 578, and 593); three units selected from Art 342A, 346, 348; nine units selected from Art 342A, 342B, 343, 346, 348, 407, 440, 442, 444,

446, 448, 452, 524, 540, 544; Journalism and Media Studies 435; Television, Film and New Media 365, 465; six units of art electives, excluding Art 357.

## Emphasis in Painting and Printmaking (Major Code: 10021) (SIMS Code: 660573)

Impacted Program. The painting and printmaking emphasis is designated as an impacted program and specific criteria, which include a portion of the Preparation for the Major, are used to admit students. To be admitted to the painting and printmaking emphasis, students must meet the following criteria:
a. Complete with a grade of $C(2.0)$ or better: Art 100, 101, 102 or $104,103,258$, and 259 . These courses cannot be taken for credit/no credit (Cr/NC);
b. Have a cumulative GPA of 2.20 or better;
c. Students not meeting the minimum GPA may petition for special consideration.
To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major. Art 100, 101, 102 or 104, 103, 204, 240, 258, 259; three units selected from Art 102, 203, 210, 216; three units selected from Art 216, 220, 223, 226, 231. Art 100, 101, 102 or $104,103,258$, and 259 must be completed with a grade of $\mathrm{C}(2.0)$ or better and cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). (30 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 30 upper division units in art to include six units of art history (Art 371, 409, 557 through 578, and 593); six units selected from Art 340, 346, 403, 404, 406, 407, 410; three units selected from Art 500, 503, 504; nine units selected from Art 344, 407, 410, 416, 443, 446, 506; six units of upper division art electives.

## Emphasis in Sculpture

(Major Code: 10021) (SIMS Code: 660581)
Impacted Program. The sculpture emphasis is designated as an impacted program and specific criteria, which include a portion of the Preparation for the Major, are used to admit students. To be admitted to the sculpture emphasis, students must meet the following criteria:
a. Complete with a grade of C (2.0) or better: Art 100, 101, 102 or $104,103,258$, and 259 . These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Have a cumulative GPA of 2.20 or better;
c. Students not meeting the minimum GPA may petition for special consideration.
To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major. Art 100, 101, 102 or 104, 103, 216, 220, 258, 259; three units selected from Art 148, 204, 210, 240, 241, 242, 248, and three units of art electives. Art 100, 101, 102 or $104,103,258$, and 259 must be completed with a grade of $C$ (2.0) or better and cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). (30 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 30 upper division units to include Art 416, 516, 517; three units selected from Art 331, 431, 432; three units selected from Art 323 or 524; three units selected from Art 325, 326, 346; six units of upper division art electives; six units of art history (Art 371, 409, 557 through 578, and 593).

## Art Major

In Preparation for the Single Subject Teaching Credential With the B.A. Degree in Applied Arts and Sciences

## (Major Code: 10021) (SIMS Code: 660505)

This major satisfies the B.A. degree in applied arts and sciences. The degree may be used to satisfy some of the application requirements for the single subject teaching credential program at SDSU.

Candidates for the single subject credential program at SDSU must complete all requirements as outlined in this catalog under Dual Language and English Learner Education or Teacher Education.

Impacted Program. The art major in preparation for the single subject teaching credential is an impacted program and specific criteria, which include a portion of the Preparation for the Major, are used to admit students. To be admitted to the art major in preparation for the single subject teaching credential, students must meet the following criteria:
a. Complete with a grade of C (2.0) or better: Art 100, 101, 103, 104, 258 and 259. These courses cannot be taken for credit/no credit (Cr/NC);
b. Have a cumulative GPA of 2.2 or better;
c. Students not meeting the minimum GPA may petition for special consideration.
To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major. Art 100, 101, 103, 104, 204, 220, 240, 258, 259; three units of art electives; Psychology 101; and either Child and Family Development 270 or Psychology 230. Art 100, $101,103,104,258$, and 259 must be completed with a grade of C (2.0) or better and cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). (36 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 32 upper division units to include Art 385, 386A, 386B, 387, 340 or 407, 559; nine units of art electives; and one course selected from each sequence below:
Sequence 1. Design Arts: Art 343, 344, 348, 440, 443, 444, 448, 540, 544
Sequence 2. 2D Arts: Art 346, 403, 404, 406, 407, 410.
Sequence 3. 3D Arts: Art 323, 325, 326, 331, 416, 423, 425, 431, 432, 516, 524, 531, 532.

## Art Minor

(Minor Code: 10021) (SIMS Code: 660501)
The minor in art consists of a minimum of 21 units in art, to include Art 100, 101, and a minimum of nine units of upper division courses in art selected from art education, art and design appreciation, art history, applied design, book arts, ceramics, drawing and illustration, exhibition design, fibers, furniture and wood, interior design, jewelry and metalwork, multimedia, painting, photography, printmaking, and sculpture.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Art History Minor

## (Minor Code: 10031) (SIMS Code: 660518)

The minor in art history includes a minimum of 21 units in art distributed as follows: Nine units to include Art 258, 259, 263. Twelve units selected from Art 371, 409, 557 through 578, and 593; and with consent of instructor selected Art 596 courses with art history content.

Courses in the minor may not be used toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Courses (ART)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

## ART 100. Drawing I (3)

Six hours.
Fundamentals of observational and subjective drawing in a variety of media.

## ART 101. Two Dimensional Design (3)

Six hours.
Fundamentals of elements and organizing principles of two dimensional design to include basic color theory in a variety of media.
ART 102. Drawing II (3)
Six hours.
Prerequisite: Art 100.
Line and value in drawing; emphasis on structure and proportion, sketching, gesture, and contour drawing.

## ART 103. Three Dimensional Design (3)

Six hours.
Fundamentals of elements and organizing principles of three dimensional design to include a variety of media and processes.

## ART 104. Artists and Designers in Real Time (3)

Overview of professional practice in contemporary art, design, art history. Readings and discussion contextualize presentation topics.

## ART 107. Photography and Visual Communication (3)

Six hours.
Visual expression and literacy using photographic concepts and media.

## ART 133. Modern Making (3) [GE]

Contemporary object design and production. Introduction to techniques, processes, and technologies used in craft, design, and creative industries.

## ART 148. Visual Presentation (3)

Six hours.
Prerequisite: Art 100.
Design drawing techniques including interior presentation drawings, interior detailing, architectural drafting, and lettering. Tools and materials used in the design professions.

## ART 157. Introduction to Art (3) [GE]

An illustrated lecture course dealing with the meaning of art derived from an investigation of the principles of art. Designed to increase the understanding and appreciation of art.

## ART 203. Life Drawing I (3)

Six hours.
Prerequisite: Art 100.
Drawing from the nude model. Maximum credit six units.

## ART 204. Painting I (3)

Six hours.
Prerequisites: Art 100 and 101.
Pictorial composition and techniques of painting.

## ART 210. Printmaking I (3)

Six hours.
Prerequisites: Art 100 and 101.
Introduction and exploration of basic printmaking media. Emphasis on aesthetic and technical processes in intaglio, lithography, relief and serigraphy.

## ART 216. Sculpture I (3)

Six hours.
Prerequisite: Art 103.
Introduction and experimentation of basic sculpture ideas, methods, and materials. Maximum credit six units.

## ART 220. Design in Crafts (3)

Six hours.
Aesthetics, functional elements, and history of designed objects across a variety of media.
ART 223. Introduction to Woodworking (3)
Six hours.
Prerequisite: Art 103.
Principles of design through the making of furniture. Basic techniques in woodworking and joinery.

## ART 226. Introduction to Ceramics (3)

Six hours.
Prerequisite: Art 100, 101, or 103.
Introduction to design and construction of ceramic forms and use of glaze for surface enhancement, to include traditional approaches to basic clay-working hand skills, contemporary issues and imagery, and craft history.

## ART 231. Jewelry and Metals IA (3)

Six hours.
Prerequisite: Art 103.
Design and construction of jewelry and small objects in non-ferrous metals. Basic fabrication, forming, and surface embellishment techniques for metal. Not open to students with credit in Art 331.

## ART 240. Fundamentals of Digital Media (3)

Six hours.
Prerequisite: Grade of C (2.0) or better in Art 101.
Principles of digital media used in visual communication.
ART 241. Graphic Design I (3)
Six hours.
Prerequisites: Grade of C (2.0) or better in Art 100, 101, 103, 104.
Proof of completion of prerequisites required: Copy of transcript.
Principles of visual presentation. Development of image-generation skills, verbal and visual design literacy. Printed and screenbased graphic design media.

## ART 242. Typography I (3)

Six hours.
Prerequisites: Grade of C (2.0) or better in Art 100, 101, 103, 104. Proof of completion of prerequisites required: Copy of transcript.

Fundamentals of typography to include history, theory, and practice with emphasis on study of letterforms and typographic layout systems for printed and screen-based media.

## ART 247. The House and Its Environment (3)

Architecture, interior design, landscape and city planning for forming the physical and aesthetic environment. Not open to students with credit in Art 347.
ART 248. Digital Presentation (3)
Six hours.
Prerequisite: Art 101.
Methods and media of the professional artist and designer stressing art principles.
ART 249. Environmental Presentation (3)
Six hours.
Prerequisite: Art 148.
Methods, materials, and tools of the professional environmental designer stressing art principles.
ART 250. The Contemporary Interior: Ideas and Narrations (3) Six hours.
Prerequisites: Art 101 and 103. Recommended: Art 148.
Elementary design strategies for interior architecture.

ART 251. Introduction to Interior Design (3)
Six hours.
Prerequisites: Art 101 and 148.
Elementary functional and aesthetic studies in interior space and form. Relationships of light, color, texture, shape and volume.

## ART 258. Introduction to Art History I (3) [GE]

Art development in painting, sculpture, architecture, and handicrafts from the dawn of art to the Renaissance. Illustrated.
ART 259. Introduction to Art History II (3) [GE]
The period from the Renaissance through the modern school treated in the same manner as in Art 258.
ART 263. African, Asian, and Oceanic Art (3)
Arts of African, Asian, and oceanic countries from prehistoric to pre-modern times. Role of religious beliefs and state ideologies in shaping visual characteristics of cultures in these regions.

## ART 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## ART 299. Special Study (3)

Prerequisites: Consent of program director and instructor.
Individual study.

## UPPER DIVISION COURSES

(Intended for Undergraduates)

## ART 313. Screen Printing Studio (3)

Prerequisite: Grade of $C(2.0)$ or better in any studio art class at 200-level or above.

Traditional and experimental processes and techniques of screen printing to include design development and artistic image making through a cohesive body of work utilizing the medium.

## ART 323. Furniture Design and Woodworking I (3)

Six hours.
Prerequisite: Art 103. Recommended: Art 148.
Principles of design through the making of furniture. Basic techniques in woodworking and joinery.

## ART 325. Ceramics IA: Throwing (3)

Six hours.
Prerequisite: Art 100, 101, or 103.
Basic methods of forming, decorating, glazing, and firing pottery forms with emphasis on the use of the potter's wheel.

## ART 326. Ceramics IB: Handbuilt (3)

Six hours.
Prerequisite: Art 100, 101, or 103.
Design and construction of handbuilt ceramic forms and application of glaze for surface enhancement. Traditional approaches and contemporary issues.

## ART 331. Jewelry and Metals IB (3)

Six hours.
Prerequisite: Art 103.
Creative design and construction in metal of jewelry and small objects. Techniques in three-dimensional forming and constructions in non-ferrous metals.

## ART 340. Digital Photography I (3)

Six hours.
Prerequisites: Art 100, 101; or Art 240 or 248.
Visual communication and expression using digital photographic media and digital imaging techniques.

## ART 341. Graphic Design II (3)

Six hours.
Prerequisites: Grade of C (2.0) or better in Art 241 and 242. Proof of completion of prerequisites required: Copy of transcript.

Visual problem-solving skills through a variety of design methods. Conceptual thinking, experimentation, and research in design for print and screen-based media. Study of content, form, signs, and symbols.

## ART 342A. Typography II (3)

Six hours.
Prerequisites: Grade of C (2.0) or better in Art 241 and 242. Proof of completion of prerequisites required: Copy of transcript.

Typographic issues pertaining to concept, expression, and meaning using design tools for development of printed and screenbased media. Implementation of narrative and time-based typographic systems.

## ART 342B. Expressive Typography (3)

Six hours.
Prerequisite: Art 203, 204, 210, 216, 220, 226, 231, 240, 241, 242, 249 , or 251.

History, process, and technology of relief printing and experimental concepts using digital technologies, moveable type and photographic processes to create individual and collaborative designs that integrate image and text. Maximum credit six units.

## ART 343. Illustration I (3)

Six hours.
Prerequisite: Art 102, 203, or 204.
Visual notation, sketching, representational drawing, and visual translation related to art and design.

## ART 344. Design for the Internet I (3)

Six hours.
Prerequisite: Grade of C (2.0) or better in Art 240, 241, 242, or 340.

Creative and practical applications of interactive visual communication for presentation on the Internet.

## ART 345. History of Graphic Design (3)

Prerequisites: Grade of C (2.0) or better in Art 258 and 259. Proof of completion of prerequisites required: Copy of transcript.

Evolution of graphic communication from prehistory through postmodern design and the digital revolution.

## ART 346. Introduction to Book Arts (3)

Six hours.
Prerequisite: Art 204, 210, 220, 240, 241, or 242.
Terminology, tools, materials, and reproduction processes related to the making of books; historical and contemporary book structures; and development of content in the form of image and text. Maximum credit six units.

## ART 347. The House and Its Environment (3)

Architecture, interior design, landscape, and city planning for forming the physical and aesthetic environment, its simplicities and complexities. Not open to students with credit in Art 247.

## ART 348. Three Dimensional Digital Media (3)

Six hours.
Prerequisite: Art 240, 241, 242, 248, or 340.
Design communication utilizing digital media as it relates to three-dimensional objects and spatial environments.

## ART 352. Methods and Materials of Interior Design (3)

Prerequisite: Art 251.
Codes, contractual issues, design practices, legal liabilities, professional ethics, and project management. Selection of materials and methods of installation.

## ART 357. World Art in Contemporary Life (3) [GE]

World art and technology from ancient to post modern era and their relationship to contemporary culture and life. Gallery visits required.

## ART 371. Medieval Art (3)

Prerequisite: Art 258.
Development of painting, sculpture, and architecture from time of Constantine through Gothic period.
ART 380. Architecture That Changed Our World (3) [GE]
Visual culture in contemporary art and design through architecture in historical survey.

## ART 385. Art Education History and Practice (3)

Six hours.
Prerequisite: Art 100, 101, or 103.
History and theory of art education. Role of art in child and adolescent development, art heritage, diversity and equity in art education and teaching methodologies.

ART 386A. Art Field Experience with Elementary and Middle School Students (1)
Prerequisites: Art 101, upper division standing, and consent of instructor.

Prepares pre-service teachers to be effective educators of visual art. Field observation, class lectures on lesson planning, instructional techniques, and strategies for teaching art to elementary school and middle school students.
ART 386B. Art Field Experience with High School Students (1)
Prerequisites: Art 101, upper division standing, and consent of instructor.
Prepares pre-service teachers to be effective educators of visual art. Field observation, class lectures on lesson planning, instructional techniques, and strategies for teaching art to high school students.

## ART 387. Art for Elementary School Teacher (3)

Six hours.
Prerequisite: Art 101, or upper division standing and consent of instructor.

A design-crafts course that explores in depth materials and processes primarily used by the elementary school teacher.

## ART 403. Life Drawing II (3)

Six hours.
Prerequisite: Art 203.
Drawing the nude model. Maximum credit six units.

## ART 404. Painting II (3)

Six hours.
Prerequisite: Art 204.
Concepts that enhance basic painting principles and a broad range of painting issues. Maximum credit six units.

## ART 406. Experimental Processes in Art (3)

Six hours.
Prerequisite: Art 203, 204, 210, 216, 220, 240, or 248.
Structure in picture making.
ART 407. Black and White Photography (3)
Six hours.
Prerequisites: Art 100, 101, and 103.
Black and white photography and darkroom techniques combined with independent research in contemporary art and photography. Criticism in contemporary context. Maximum credit six units.
ART 409. Photography: Past and Present (3)
Prerequisite: Art 258 or 259 for art majors or Art 157 for non-art majors.

Artistic, technological, social, and political influences on photography from 1839 to contemporary practice. Aesthetic philosophies, major movements, important practitioners and influences on acceptance of photography as art. Photography incorporated in other art mediums.

## ART 410. Intaglio Printmaking (3)

Six hours.
Prerequisite: Art 210 or 346.
Creative intaglio-etching, drypoint, aquatint, engraving and variations. Emphasis on fine print quality and technical development. Maximum credit six units.
ART 412. Museums from the Inside (3)
Prerequisite: Art 157 or 258 or 259.
How museums work. The institutional mission statement, community involvement, trustees, business functions and strategies, fundraising, promotions, branding, non-profit accounting, curatorial, education and outreach, collection management, facilities design, research, libraries, exhibition, collection, and public security.

## ART 416. Sculpture II (3)

Six hours.
Prerequisite: Art 216.
Intermediate level investigations into sculptural ideas, processes, and materials. Maximum credit six units.

## ART 423. Furniture Design and Woodworking II (3)

Six hours.
Prerequisite: Art 323.
Intermediate individual design: Exploration of materials, processes and function. Specialized techniques focusing on case construction, making of drawers and doors for furniture. Maximum credit six units.

## ART 425. Ceramics II (3)

Six hours.
Prerequisite: Art 325 or 326.
Continuation of Art 325 or 326 . Further development of knowledge, skills and philosophy of ceramics through individual creative projects.
ART 431. Jewelry and Metals IIA - Jewelry (3)
Six hours.
Prerequisite: Art 231 or 331.
Further development of design and metalworking skills specifically related to jewelry. Specialized techniques such as casting, chasing, stone setting, die forming and enameling. Maximum credit six units.

## ART 432. Jewelry and Metals IIB - Metalsmithing (3)

Six hours.
Prerequisite: Art 231 or 331.
Creative design and techniques in metalsmithing. Maximum credit six units.

## ART 440. Digital Photography II (3)

Six hours.
Prerequisites: Grade of $C(2.0)$ or better in Art 340, or 240 and 407.

Visual and creative expression using digital photographic media with emphasis on refining technical and conceptual visual communication skills. Maximum credit six units.

## ART 441. Graphic Design III (3)

Six hours.
Prerequisites: Grade of C (2.0) or better in Art 341, 342A. Proof of completion of prerequisites required: Copy of transcript.

Analysis and translation of complex information into visual communication systems.
ART 442. Typography III (3)
Six hours.
Prerequisites: Grade of C (2.0) or better in Art 341, 342A. Proof of completion of prerequisites required: Copy of transcript.

Typographic problem solving including more complex text materials and type with image. Maximum credit six units with consent of instructor.

## ART 443. Illustration II (3)

Six hours.
Prerequisite: Grade of C (2.0) or better in Art 343.
Drawing and illustration methods, materials, tools, and processes as they relate to art and design.

## ART 444. Design for the Internet II (3)

Six hours.
Prerequisite: Grade of C (2.0) or better in Art 344.
Intermediate design and development for World Wide Web. Topics include Web standards, CSS, advanced scripting, and experimental applications. Maximum credit six units.
ART 445A. Professional Practice in Art and Design (1) Cr/NC
Two hours.
Prerequisite: Any 300-level art course.
Evolving role of the artist and designer in contemporary art and design practice, standards of professional conduct, and business practices.

## ART 445B. Graphic Design Internship (3) Cr/NC

Prerequisites: Grade of $C(2.0)$ or better in two of the following: Art 441, 442, 450, 454, or 541, and portfolio review. Proof of completion of prerequisites required: Copy of transcript.

Field experience with practicing professionals. Maximum credit six units with consent of instructor.

ART 445C. Senior Portfolio/Exhibition (3)
Six hours.
Prerequisites: Grade of $C(2.0)$ or better in two of the following: Art 441, 442, 450, 454, or 541 for graphic design majors. Grade of C (2.0) or better in two of the following: Art 444, 448,540, or 544 for multimedia majors; and portfolio review. Proof of completion of prerequisites required: Copy of transcript.

Planning, strategy, and development of a comprehensive body of design work to be professionally presented in a portfolio and/ or exhibition format. Maximum credit six units with consent of instructor.

## ART 446. The Printed Book (3)

Six hours.
Prerequisite: Art 340, 342A, 342B, 346, 407, or 410.
Creative research focused on concept, context, and form as they relate to communication and personal or collaborative expression within the context of the book. Maximum credit six units.

## ART 448. Sequential Media (3)

Six hours.
Prerequisite: Grade of C (2.0) or better in Art 340, 341, 344, or 348.

Study and presentation of sequential imagery related to digital video production and motion graphics. Maximum credit six units.

## ART 450. Packaging Design (3)

Six hours.
Prerequisites: Grade of C (2.0) or better in Art 341, 342A. Proof of completion of prerequisites required: Copy of transcript.

Principles and theories of design: branding, typography, illustration, and photography applied to three-dimensional form within a specified social and cultural context with emphasis on strategy and concept; structure, functionality and materials; and modular systems.

## ART 451. Residential Interior Design (3)

Six hours.
Prerequisites: Art 249, 250, 251.
Survey, analysis and conceptual design methods of residential interiors stressing materials, equipment, components and structural detailing. Maximum credit six units.

## ART 452. Art and Design Internship (1-3) Cr/NC

Prerequisites: Any 300-level art course and portfolio.
Field experience with practicing professional artists and designers. Maximum credit six units.

## ART 453. Detail Design for Mixed-Use Interiors (3)

Six hours.
Prerequisites: Art 249, 250, 251. Recommended: Art 451.
Approaches to codes and regulations, construction and assembly drawings, contractual agreements, environmental design, project supervision, space planning, and specification writing.

## ART 454. Experiential Graphic Design (3)

Six hours.
Prerequisites: Grade of C (2.0) or better in Art 341, 342A. Proof of completion of prerequisites required: Copy of transcript.

Identification and communication systems applied to environmental solutions. Landmark and wayfinding systems in interior, exterior, and architectural environments. Maximum credit six units with consent of instructor.

## ART 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## ART 499. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)

## ART 500. Advanced Drawing (3)

Six hours.
Prerequisite: Art 102, 203, 204, 210, 343, or 406.
Drawing emphasizing qualitative aspect of visual subject matter. Maximum credit six units.

## ART 502. Inter-Media (1-3)

Two hours for each unit of credit.
Prerequisites: Upper division standing and consent of instructor.
Process and materials in plane and space. Maximum credit six units. M.F.A. students: Maximum credit six units applicable to the M.A. degree; nine units applicable to the M.F.A. degree.

## ART 503. Life Drawing and Painting III (3)

Six hours.
Prerequisites: Art 204 and 403.
Drawing and painting from nude and costumed models. Maximum credit six units.
ART 504. Painting III (3)
Six hours.
Prerequisite: Art 404.
Approaches to contemporary concepts in painting. Maximum credit six units.

## ART 506. Contemporary Issues (3)

Prerequisite: Upper division standing.
Art and design issues relevant to contemporary global society. Sources of inspiration in art and design practice and topical issues examined. Field trips.

## ART 516. Sculpture III (3)

Six hours.
Prerequisite: Art 416.
Advanced level investigations into sculptural ideas, processes, and materials. Maximum credit six units.

## ART 517. Figurative Sculpture II (3)

Six hours.
Prerequisite: Art 216.
Figurative study with emphasis on individual exploration. Maximum credit six units.

## ART 523. Furniture Design and Woodworking III (3)

Six hours.
Prerequisites: Six units of Art 423.
Advanced individual design: Exploration of materials, process and function. Continued focus on development of personal design statements and specialized techniques. Maximum credit six units.

## ART 524. Digital Fabrication for Art and Design (3)

## Six hours.

Prerequisite: A 300- or 400-level art or design course.
Design, visualization, and fabrication processes utilizing modeling and machining software. Basic techniques in computer-aided design (CAD) and computer-aided manufacturing (CAM). Smallscale production techniques and outsourcing for artists and designers. Maximum credit six units.

## ART 525. Ceramics III (3)

Six hours.
Prerequisite: Art 425.
Study of ceramic design through creative projects of clay forms. Maximum credit six units.

## ART 526. Clay and Glaze Technology in Ceramic Design (3)

Six hours.
Prerequisite: Art 425.
Experimentation and application of research concerning the use of ceramic materials and techniques as an integral part of the design process. Maximum credit six units.

## ART 531. Jewelry and Metals IIIA-Jewelry (3)

Six hours.
Prerequisite: Art 431.
Problems involving fabrication processes already studied in order to increase technical competence while exploring personal design statements; specialized techniques such as photoetching and electroforming. Maximum credit six units.
ART 532. Jewelry and Metals IIIB-Metalsmithing (3)
Six hours.
Prerequisite: Art 432.
Advanced problems involving metal processes to increase technical competence while exploring personal design statements. Maximum credit six units.

## ART 540. Advanced Photographic Projects (3)

Six hours.
Prerequisites: Grade of C (2.0) or better in Art 440, or Art 340 and 407.

Visual and creative expression using photographic media, including traditional and digital processes. Emphasis on conceptual project development and portfolio. Maximum credit six units with consent of instructor.

## ART 541. Graphic Design IV (3)

Six hours.
Prerequisites: Grade of $C$ (2.0) or better in two of the following: Art 441, 442, 450, 454. Proof of completion of prerequisites required: Copy of transcript.

Strategy, planning, and problem solving related to visual communication systems with emphasis on social and cultural context.
ART 542. Typography IV (3)
Six hours.
Prerequisite: Grade of $C$ (2.0) or better in Art 442. Proof of completion of prerequisite required: Copy of transcript.

Individual creative and scholarly research in typography, conceptual and contextual exploration, typographic experimentation based on theory, strategy, and problem solving. Maximum credit six units with consent of instructor.

## ART 543. Illustration III (3)

Six hours.
Prerequisite: Grade of C (2.0) or better in Art 443.
Strategy and problem solving of professional illustration as related to art and design; individual conceptual and contextual exploration. Maximum credit six units.

## ART 544. Emerging Technologies in Multimedia (3)

Six hours.
Prerequisite: Grade of C (2.0) or better in Art 344, or 348, or 440, or 448 , or 540 .

Advanced creative studies in emerging electronic communications, including cyberstudios, Internet and multimedia. Exploration in collaborative, interdisciplinary, and international projects. Maximum credit six units with consent of instructor.

## ART 545. Design Studio (3)

Six hours.
Prerequisites: Grade of $C(2.0)$ or better in two of the following: Art 441, 442, 450, 454, 541, and portfolio review. Proof of completion of prerequisites required: Copy of transcript.

Solutions to design problems for clients in a studio environment including business procedures and production management. Development of a professional level portfolio. Maximum credit six units with consent of instructor.

## ART 546. Advanced Book Arts (3)

Prerequisite: Art 446.
Design and creation of limited edition artist books and independent projects made with mixed media and hand printing techniques such as letterpress, intaglio, woodcut, lithography, photography, and experimental media. Maximum credit six units.

## ART 547. The Modern Built Environment (3)

Prerequisite: Art 247, 258, 259, 347, or 357.
Survey and theory of the modern built environment.

## ART 552. Public Interior Design (3)

Six hours.
Prerequisite: Art 451 and 453.
Interior design projects focusing on the public, social, and cultural sectors. Maximum credit six units.

## ART 553. Commercial Interior Design (3)

Six hours.
Prerequisite: Art 552.
Projects in interiors involving space planning analysis, specification writing, materials selection and furnishing design appropriate to commercial needs. Maximum credit six units.

## ART 557. Nineteenth Century European Art (3)

Prerequisite: Art 259.
Development of painting, sculpture, and architecture from the French Revolution to 1900.

ART 558. Twentieth Century European Art to 1945 (3)
Prerequisite: Art 259.
Major developments in the visual arts and art criticism from 1880
to 1945 (Post-Impressionism through Surrealism).

## ART 559. Twentieth Century European and American Art

 Since 1945 (3)Prerequisite: Art 259.
Major developments in the visual arts and art criticism since 1945.

## ART 560. History of American Art (3)

Prerequisite: Art 259.
Development of painting, sculpture, and architecture from the Native American art and Colonial Period to the present.
ART 568. Art of Crete, Mycenae, Greece, and Rome (3)
Prerequisite: Art 258.
Development of painting, sculpture, architecture, and crafts from prehistoric times to the fifth century A.D.
ART 571B. Contemporary Art of Latin America (3)
Prerequisites: Art 258 and 259.
Work created by leading contemporary Latin American artists from 1960 to present. Field trips required.
ART 573A. Italian Art of the Fourteenth and Fifteenth Centuries (3)
Prerequisite: Art 259.
Italian arts, architecture, artists, and patrons from fourteenth century Proto-Renaissance period through fifteenth century revival of classical humanism in city states of Florence, Siena, Bologna, Mantua, and Padua.
ART 573B. Italian Art in the Sixteenth Century (3)
Prerequisite: Art 259.
High Renaissance in Florence and Rome, followed by disintegration of classical principles and domination of Mannerism in Central and Northern Italy and history of arts of Venice in sixteenth century.
ART 575. European Art from 1600 to 1750 (3)
Prerequisite: Art 259.
Architecture, sculpture, and painting of the Baroque and Rococo periods.
ART 577. History of Architecture (3)
Prerequisites: Art 258 and 259.
Architecture from primitive times to the present.
ART 578. Seminar in History of Museums and Exhibitions (3)
Prerequisite: At least one course selected from Art 557, 559, or 560.

Origin, history, and function of the museum. Theories of collecting, museums, and construction of knowledge. Role of elites in formation and construction of museums, controversial exhibitions, exhibitionary practices, and globalism.
ART 591. Gallery Exhibition Design (3)
Six hours.
Prerequisites: Fifteen units of art.
Fundamental art elements and principles applied to the theories and techniques of gallery exhibition design.
ART 593. History and Methodology of Art History (3)
Prerequisites: Twelve units of upper division art history.
Readings and discussions on the historiography of art and on modern methodologies for art historical research.
ART 596. Advanced Studies in Art and Art History (1-4)
Prerequisites: Twelve units of art and art history and consent of instructor.

Advanced topics in art and art history. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## Arts and Letters

Offered by the College of Arts and letters

OFFICE: Arts and Letters 600
TELEPHONE: 619-594-5431 / FAX: 619-594-6281
E-MAIL: cal@sdsu.edu
WEBSITE: http://cal.sdsu.edu
Faculty
Faculty assigned to teach College of Arts and Letters courses (CAL) are drawn from departments within the college.

## Administered by the Center for Human Dynamics

 in the Mobile AgeMaster of Science degree in big data analytics.

## Science, Technology, and Society Studies Minor

## (SIMS Code: 117030)

The interdisciplinary minor in science, technology, and society studies examines the dynamic and changing ways that science and technology influence, and are shaped by, culture, social relations, and institutions. The minor provides students with the intellectual tools necessary to understand the rapid and profound transformations of our social environment resulting from the development of new technologies and the changing relations between scientific expertise and public discourse.

The minor in science, technology, and society studies consists of a minimum of 15 units to include Arts and Letters 301, 590, History 514 or Women's Studies 382.

The remaining six units of electives selected from Arts and Letters 580, Anthropology 349, Communication 540, European Studies 160, History 102, Humanities 409, 412, Journalism and Media Studies 312W, Linguistics 354, Philosophy 140, 537, Religious Studies 363, Sociology 460, Women's Studies 582. At least three units of electives must be upper division.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Contact the adviser, Dr. Catherine E. Clune-Taylor (cclunetaylor@sdsu.edu), for additional information.

## Pop Culture Certificate

## (SIMS Code: 118801)

The basic certificate in pop culture allows students to complete their course of study through multidisciplinary coursework offered by the College of Arts and Letters and the College of Professional Studies and Fine Arts. Courses focus on commodities, consumer behaviors, fiction, film, gaming, music, performance, social networks, television, and visual arts, to identify social trends in an ever-competitive job market.

The certificate requires 15 units to include Humanities 410; three units selected from Dance 281, Journalism and Media Studies 210, 408, Learning Design and Technology 515, Music 151, 345, 351, Public Administration 582, Television Film and New Media 160, 363, 364A, 364B, 430; and nine units selected from Chicana and Chicano Studies 400 [or Latin American Studies 400], Comparative Literature 584, European Studies 424, French 424, German 320, History 537, Humanities 380 [or Japanese 380], 409, Italian 426, Portuguese 307 [or Latin American Studies 307], Religious Studies 356, Rhetoric and Writing Studies 250, 414, Russian 250, 310, Sociology 335, Women's Studies 355.

Students must obtain a grade of $C$ (2.0) or better in each of the certificate courses. If applicable, six units of the certificate may be applied to a major in the College of Arts and Letters or the College of Professional Studies and Fine Arts, but may not be applied to a minor.

Visit https://cal.sdsu.edu/programs/pop-culture or contact the adviser, Dr. Madhavi M. McCall (mccall@sdsu.edu), to enroll in the certificate program or for additional information.

## Courses (CAL)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

## CAL 100. Explore CAL (1) $\mathrm{Cr} / \mathrm{NC}$

College of Arts and Letters advising, departments, fields of study, and high-impact practices. Connect with administrators, advisers, faculty, students, and other members of the college community.

## CAL 201X. Mathematics and Quantitative Reasoning CAL

## Support (1) Cr/NC

Three hours of activity.
Prerequisite: Concurrent registration in Economics 201, Geography 104, Linguistics 270, Philosophy 120, Political Science 201, or Sociology 201. Required for students who have not satisfied the SDSU Mathematics/Quantitative Reasoning Assessment requirement.

Required support course for General Education Mathematics/ Quantitative Reasoning classes offered in the College of Arts and Letters (CAL). Credit in this course satisfies the SDSU Mathematics/ Quantitative Reasoning Assessment requirement.
CAL 222. Art, Sport, and Culture in Contemporary Brazil (3) [GE] Brazilian culture and history to include capoeira, carnaval, forro, funk, ju-jitsu, samba, soccer, street art, and street theatre. Ethnic and racial diversity, nationalism, regional identity, right to urban space, rural and urban life.

## CAL 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
CAL 301. Concepts and Ideas in Science and Technology Studies (3) [GE]
Frameworks, history, key concepts, and methods. Scientific and technological assumptions and practices. Engaging people, policies, and practices in science, technology, engineering, and mathematics disciplines.

## CAL 450. Study Abroad (1-3)

Prerequisite: Upper division standing.
Study abroad in Arts and Letters. See Class Schedule for specific content and geographic location. May be repeated with new content and approval of major adviser for a maximum of three units applicable to a bachelor's degree.

## CAL 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

CAL 580. Science and Technology Topics in Society (3)
Prerequisite: Upper division or graduate standing.
Advanced systematic study of a topic in science, society, and technology. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.
CAL 590. Capstone in Science, Technology, and Society (3)
Prerequisite: Arts and Letters 301.
Culminating capstone experience. Synthesis and integration of academic work and professional preparation to include major-specific coursework and high-impact practices. Formal research paper and formulation of action plan for post-baccalaureate aspirations.

# Asian Studies 

In the College of Arts and Letters

## OFFICE: Arts and Letters 473

TELEPHONE: 619-594-0931 / FAX: 619-594-0257
WEBSITE: http://asiapacific.sdsu.edu

## Faculty

Asian and Pacific Studies is administered by the Asian and Pacific Studies Committee. Faculty assigned to teach courses in Asian and Pacific studies are drawn from Anthropology, Art and Design, Chinese, Economics, English and Comparative Literature, Geography, History, Japanese, Journalism and Media Studies, Linguistics and Asian/Middle Eastern Languages, Philosophy, Political Science, Public Health, Religious Studies, Sociology, Speech, Language, and Hearing Sciences, Women's Studies.
Emeritus: Madhavan, Weiner
Director: Sandra A. Wawrytko (Philosophy)
Undergraduate Adviser: Sandra A. Wawrytko (Philosophy)
Committee: An (Geography), Edgerton-Tarpley (History), Ghosh
(Women's Studies), Guang (Political Science), Hua (Women's Studies),
Kitajima (Japanese), Li (Social Work), Riley (Anthropology), Samraj (Linguistics), Timalsina (Religious Studies), Tsou (Geography), Varadarajan (Political Science), Wawrytko (Philosophy), Wu (Linguistics and Asian/Middle Eastern Languages), Yu (Public Health), Zhang (Chinese), Zhong (Journalism and Media Studies).

## Offered by Asian and Pacific Studies

Master of Arts degree in Asian studies.
Major in Asian studies with the B.A. degree
in liberal arts and sciences.
Emphasis in Chinese studies and language.
Minor in Asian studies.
Minor in Chinese studies.
Minor in Japan studies.

## The Major

The importance of the immense and varied regions of Asia and the Pacific Rim are reflected in the rich culture and history of Asian people, Asian contributions to the world's literature and art, religion and philosophy, as well as contemporary international relations and economics.

The major in Asian studies is multidisciplinary. Students can enroll in classes from a wide range of departments and programs, such as anthropology, art, Chinese, comparative literature, economics, history, Japanese, philosophy, political science, religious studies, sociology, and women's studies. Because the program draws its faculty from multiple programs and departments on the SDSU campus, the major is able to provide resources for understanding East Asia, South Asia, Southeast Asia, the Pacific Rim, the relation of these peoples and cultures to North America, and Asian American diaspora communities. Areas of special interest may be pursued in depth.

The major provides students with the background for careers that require an understanding of Asia, whether in academic, business, government, or community and social services. Students in the major develop an understanding of cultural heritage, societies, and languages, as well as the social, political, and environmental issues of the Asian and Pacific regions. Nonmajors who wish to increase their understanding about Asian and Pacific peoples and cultures will find courses available in Asian Studies.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Impacted Program

The Asian studies major is an impacted program. To be admitted to the Asian studies major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Asian Studies Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 03011) (SIMS Code: 111101)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in Asian studies courses can apply to the degree.

A minor is not required with this major.
Preparation for the Major. Asian Studies 100, 101. (6 units)
Language Requirement. Competency (equivalent to that attained through three semesters or five quarters of college study) in one Asian language, unless specifically waived by the undergraduate adviser. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Rhetoric and Writing Studies 305W or 500W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 27 upper division units in Asian Studies. Courses from other departments [or cross-listed courses] acceptable for the Asian Studies major include: Chinese 496, 499; Filipino 460 [or Asian Studies 460]; History 420, 421 [or Asian Studies 421], 422 [or Asian Studies 422], 566, 567, 570, 574; Japanese 421^, 496, 499; Korean 321 [or Asian Studies 321], 430 [or Asian Studies 430]; Philosophy 351 [or Asian Studies 351], 353, 516*, 565, 575*; Political Science 362, 365, 575^; Religious Studies 338, 339, 345, 581*, 583*, 596*; Women's Studies 331.

Other Asian-content courses may be applied to the major with written approval of the undergraduate adviser.
*Acceptable when of relevant content.
Andicates course with prerequisites not included in requirements listed above.

## Emphasis in Chinese Studies and Language

Close to one quarter of humanity lives in China, as has been the case for most of human history. Two of the world's major religions originated in China, as did key technologies ranging from paper and porcelain manufacturing to gunpowder and the magnetic compass. China's literature, art, poetry, and love of history are also world famous. In the 21st century, China's economic growth and increasing political clout play a crucial role in world affairs. An increasing number of Americans are discovering the importance of learning about and engaging with China and Chinese diaspora communities. The emphasis in Chinese studies and language seeks to provide student with facility in the Chinese language and with a broad understanding of Chinese philosophy, religion, art, history, economics, politics, and geography.

Students selecting this emphasis may choose either Track (a) Chinese Studies or Track (b) Chinese Language.

Preparation for the Major. Asian Studies 100, 101; Chinese 101, 102, 201, 202; and one course selected from Anthropology 102, Geography 102, History 101, Linguistics 101, Political Science 103, or Religious Studies 101. The Chinese language courses can be satisfied by examination or completion of Chinese 202. See adviser. (29 units)

Language Requirement. The language requirement for graduation is automatically fulfilled by completing coursework for preparation for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Rhetoric and Writing Studies 305W or 500W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Study Abroad Requirement. Capstone Experience (3 units). Students are required to fulfill the capstone requirement for the emphasis by study abroad for one semester on an SDSU pre-approved program in mainland China, Taiwan, Hong Kong, or Macao.

## Track (a): Chinese Studies

## (SIMS Code: 111103)

Major. A minimum of 24 upper division units in Chinese studies to include Asian Studies 351 [or Philosophy 351], History 566, 567; Political Science 362, 365; and nine units selected from Asian Studies 421 [or History 421], 499, Communication 496*, History 420, 435*, Journalism and Media Studies 450*, Political Science 575, Religious Studies 338, 345.

## Track (b): Chinese Language

## (SIMS Code: 111104)

Major. A minimum of 24 upper division units to include Chinese 301, 302, 431, 433, 434, 496* (three units); six units selected from Asian Studies 351 [or Philosophy 351], History 567, Political Science 365 .

> *Acceptable when of relevant content.

## Asian Studies Minor

(SIMS Code: 111101)
The minor in Asian studies consists of a minimum of 18 units to include Asian Studies 100, 101; and any combination of 12 units of upper division courses in Asian studies, in Asian-content courses approved for the major, or upper division courses approved by the undergraduate adviser.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Chinese Studies Minor <br> (SIMS Code: 111110)

The minor in Chinese studies consists of a minimum of 15 units to include Asian Studies 100 or 101, 351 [or Philosophy 351], History 567; Political Science 365; and three units selected from History 566, Religious Studies 499 (Special Study), or another upper division course with appropriate focus on China, with approval of minor adviser.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Japan Studies Minor

## (SIMS Code: 111111)

The minor in Japan studies consists of a minimum of 12 units of upper division courses selected from Asian Studies 458 [or Religious Studies 458], History 570, Japanese 499, Political Science 362, Religious Studies 341, 345, or other upper division courses in a department with appropriate content on Japan, with approval of minor adviser.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Courses (ASIAN)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

ASIAN 100. State and Society in the Asia Pacific (3) [GE]
Social, political, and economic foundations of Asia Pacific societies. Emphasis on diversity of Asian cultures, their relationship with each other and within the global community.

## ASIAN 101. Asian Thought and Cultures (3) [GE]

Intellectual and cultural underpinnings of East, Southeast, South, and Central Asia, from ancient to present, by means of a comparative overview of philosophies, religions, literatures, architectural design, visual and performing arts, highlighting continuing influence of tradition in contemporary Asian societies.
ASIAN 110. Elementary Conversational Chinese (3) [GE]
(Same course as Chinese 100)
Introductory conversational course for students with little or no previous background in Chinese. Focuses on daily tasks that one may encounter when first going to a Chinese-speaking community. Develops elementary listening and speaking skills needed for accomplishing these tasks.

## ASIAN 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

## ASIAN 300. Asia's Global Future (3) [GE]

Survey of contemporary Asia Pacific region and future prospects, politically, socially, and economically, as historically grounded in cultural and philosophical roots.
ASIAN 320. Asian Environmental Issues (3) [GE]
Prerequisite: Upper division standing.
Major Asian environmental issues such as acid rain in China, dams on Mekong Delta, deforestation, and biodiversity conservation in Southeast Asia, population density in Bangladesh, overpopulation in China and India, and impending failure of Green Revolution.

## ASIAN 321. Korean Civilization (3) [GE]

(Same course as Korean 321)
Prerequisite: Upper division standing.
Development of art, religion, philosophy, political, social institutions through different periods in Korean history. Humanistic dimensions of the Korean mind, traditions, heritage. Taught in English.
ASIAN 351. Chinese Philosophy (3) [GE]
(Same course as Philosophy 351)
Philosophical traditions which have shaped the intellectual life and culture of China. Emphasis on foundational texts surviving from pre-Han China.

ASIAN 353. Language and Social Interaction in China (3) [GE] (Same course as Chinese 353)
Stereotypes and empirical findings of the relationship between language use and social behavior in China. Confucianism and Cultural Revolution; personal relationships and hierarchical structure; characteristics of Chinese language and interaction; politeness in everyday social encounters in China; cultural miscommunication. Taught in English.

## ASIAN 421. Asian History Since 1600 (3) [GE]

## (Same course as History 421)

China, Japan, and India, with case studies on Philippines and Vietnam. Comparative Asian responses to Western imperialism, nationalism, revolution, and war. Diverse Cold War paths; contemporary problems and prospects.

## ASIAN 422. Asian American Experiences (3) [GE-ES]

(Same course as History 422)
Prerequisite: Upper division standing.
Experiences of Asian/Pacific Islander Americans to include immigration, colonialism, imperialism, exclusion, citizenship, labor, family, community, gender, popular culture, refugees, multi-racial tensions, globalization, and resistance.

## ASIAN 425. The Vietnam War (3) [GE]

(Same course as History 425)
The Vietnam War from a global perspective. The war's evolution in Vietnam and Indochina as well as its implications on socialist nations, the Third World, and the West.
ASIAN 430. Contemporary Korean Culture Through
Media (3) [GE]
(Same course as Korean 430)
Prerequisite: Upper division standing.
Contemporary Korean culture and society as reflected in various modes of media (news, drama, film, instructional technology). Korean culture in neighboring countries and beyond. Historical perspective to modern Korean culture. Taught in English.

## ASIAN 458. Asian Traditions (3) [GE]

(Same course as Religious Studies 458)
Prerequisites: Six units of Asian-content courses or upper division standing.

Social, cultural, economic, and political traditions of South, Southeast, and East Asia; how they functioned in theory and practice prior to twentieth century.
ASIAN 460. Contemporary Issues in Filipino-American

## Communities (3) [GE-ES]

## (Same course as Filipino 460)

Prerequisite: Upper division standing.
History of Philippines and Filipino immigration to US. Current issues in Filipino American communities to include labor, health, gender and sexuality, race relations, family culture and parenting, youth and the elderly, ethnic identity and empowerment.

## ASIAN 480. Asian Leadership Models (3)

Prerequisite: Upper division standing.
Asian philosophies of leadership to include conflict resolution, decision-making, definitions of a leader, education, and thinking styles. Applications of theoretical structures in business and economics, government and diplomacy, negotiating war and peace, and pedagogy. Primary ancient and contemporary texts from Asian cultures.

## ASIAN 490. Study Abroad in Asian Studies (3) [GE]

Prerequisites: Upper division standing. See Class Schedule for additional prerequisites.

Selected topics in Asian studies. Courses taught abroad in Asian countries through a program approved by Center for Asian and Pacific Studies to include SDSU faculty-led courses in these countries. May be repeated with new content. See Class Schedule for specific content and geographic location. Maximum credit six units of which three units may be applicable to General Education.

ASIAN 496. Experimental Topics (1-4)
Prerequisite: Six units of Asian-content courses.
Selected topics in Asian studies. May be repeated with new content. Maximum credit six units with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## ASIAN 499. Special Study (1-3)

Prerequisites: At least six units of upper division work completed toward the major or minor in Asian studies and consent of the instructor.

Individual study. Maximum credit six units.

## UPPER DIVISION COURSE

(Also Acceptable for Advanced Degrees)
ASIAN 596. Selected Studies in Asian Cultures (3)
Topics on various aspects of Asian studies. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.

# Astronomy 

In the College of Sciences

OFFICE: Physics 131
TELEPHONE: 619-594-6182 / FAX: 619-594-5485
E-MAIL: astroinfo@sdsu.edu
WEBSITE: http://astronomy.sdsu.edu
Faculty
Emeritus: Angione, Daub, Etzel, Leach, May, Shafter, Talbert
Chair: Sandquist
Professors: Orosz, Sandquist, Welsh
Associate Professors: Leonard, Quimby
Assistant Professor: Rubin
Lecturer: Rao Sudhakar
Adjunct: Blanco
Offered by the Department
Master of Science degree in astronomy.
Major in astronomy with the B.A. degree
in liberal arts and sciences.
Major in astronomy with the B.S. degree
in applied arts and sciences.
Minor in astronomy.

## The Major

Will the universe expand forever? Is there life on other planets? How are stars formed? These are the types of questions being addressed by students majoring in astronomy. Some areas of study in astronomy include the sun, the solar system, the stars, the Milky Way, the galaxies, and cosmology.

SDSU is the only institution in the California State University system that offers a complete academic program in astronomy. Students actively learn to collect astronomical observations and conduct scientific research.

Joint faculty and student research activities are principally in the area of observational astrophysics. These include ongoing investigations of cosmology, eclipsing binary stars, the formation of galaxies, extrasolar planets, low-mass stars, and star clusters.

The department operates Mount Laguna Observatory, which is frequently used to train students in the use of astronomical telescopes and instruments. Faculty and students also participate in space astrophysics research.

Graduates with a bachelor's degree are trained in the application of the scientific method to the realm of astronomy and astrophysics, which requires a good foundation of understanding of physics and mathematics. Additionally, our students obtain useful skills in computing applications and in the use of modern instrumentation. Many of our graduates find employment in education, industry, with astronomical observatories, or with government agencies or contractors. Jobs that support continuing research include electronic technicians, image analysts, instrument makers, laboratory technicians, opticians, software developers, and telescope operators. Some of our graduates pursue advanced degrees.

Employment opportunities for astronomers who have advanced degrees include positions at colleges and universities, national observatories and government laboratories, planetariums, and in industry and private companies.

## Impacted Program

The astronomy major is an impacted program. To be admitted to the astronomy major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Astronomy Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 19111) (SIMS Code: 770501)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in astronomy courses can apply to the degree.

A minor is not required with this major.
Preparation for the Major. Astronomy 201; Mathematics 150, 151, 252; Physics 195, 195L, 196, 196L, 197, 197L. (27 units)

Recommended: Chemistry 200, Computer Science 107.
Language Requirement. Competency (equivalent to that which is normally attained through three consecutive semesters of college study) is required in one foreign language to fulfill the graduation requirement. Refer to the section of this catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 27 upper division units in astronomy and physics to include Astronomy 350, 440, 450; Mathematics 342A; Physics 350, 354; and nine units selected with the approval of the astronomy undergraduate adviser. Recommended: Physics 360, 400A, 406, 410.

## Astronomy Major

With the B.S. Degree in Applied Arts and Sciences

## (Major Code: 19111) (SIMS Code: 770502)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

Preparation for the Major. Astronomy 201; Mathematics 150, 151, 252; Physics 195, 195L, 196, 196L, 197, 197L. (27 units)

Recommended: Chemistry 200, Computer Science 107.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units in astronomy and physics to include Astronomy 350, 440, 450, 498A, 498B; Physics 350, 354, 360, 400A; and 12 units selected from Astronomy 320, 510; Physics 311, 317, 400B, 406, 410.

Minor in Mathematics. All candidates for the B.S. degree in astronomy must complete a minor in mathematics, to include Mathematics 342A, 342B, and three additional upper division units of electives in mathematics. Recommended: Mathematics 340; Statistics 551A.

## Astronomy Minor

## (SIMS Code: 770501)

The minor in astronomy consists of a minimum of 15 units to include Astronomy 201 and 12 upper division units selected from Astronomy 303, 310, 320+, 350+, 440+, 450+, 510+, or 496 subject to approval of the minor adviser.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

> +Additional prerequisites required.

## Courses (ASTR)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

ASTR 101. Principles of Astronomy (3) [GE]
Discover the universe: planets, stars, galaxies, and our place in the cosmos; the Big Bang; how stars shine; comets, meteors, nebulae, the Milky Way; black holes and other exotic objects. Not open to students with credit in Astronomy 201.

## ASTR 109. Astronomy Laboratory (1) [GE]

Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Astronomy 101 or 201.

Demonstration of astronomical principles through observations with astronomical instruments and analysis of astronomical data. A nighttime field trip to Mount Laguna Observatory is required.

## ASTR 201. Astronomy for Science Majors (3) [GE]

Prerequisite: Satisfaction of the SDSU Mathematics/Quantitative Reasoning Assessment requirement.

Directed toward students with a strong interest in science and mathematics. Understanding the night sky, introduction to the solar system, star formation and evolution, extrasolar planets, nature of the Milky Way and other galaxies, origin and fate of the universe. Students with credit in Astronomy 101 and 201 will receive a total of three units of credit toward graduation.
ASTR 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
ASTR 303. A Walk Through the Stellar Graveyard (3) [GE]
Prerequisites: Completion of the General Education requirement in Foundations of Learning II.A.1. Physical Sciences and in Foundations of Learning II.A.4. Mathematics/Quantitative Reasoning.

Deaths of stars and their exotic corpses to include black holes, neutron stars, and white dwarfs. User-friendly introduction to Einstein's relativity theories, gravitational waves, and warped space-time.

## ASTR 310. Astrobiology and the Search for Extraterrestrial

Life (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A.1. Physical Sciences or II.A.2. Life Sciences.

Extraterrestrial life in our solar system and other planetary systems; formation of stars and planets; UFOs and SETI; origin and evolution of life on earth; life in extreme environments; cosmology and structure of universe.
ASTR 320. Solar System Astronomy (3)
Prerequisites: Astronomy 201 and Physics 197, 197L.
Structures of the planets; their surfaces, atmospheres, and satellite systems; asteroids, comets, and meteoroids. The Sun, its structure, energy production, and influence in the solar system. Life in the solar system.

ASTR 350. Astronomical Techniques (3)
Prerequisites: Astronomy 201, Mathematics 342A, and Physics 197.

Astronomical observation and optics. Data acquisition and reduction for modern astronomical instrumentation including photometry, direct imaging, and spectroscopy. Techniques for obtaining precise measurements and determining measurement uncertainties.

## ASTR 440. Astrophysics of Stars (3)

Prerequisites: Physics 354. Recommended: Physics 360.
Lives, interior structures, and physics that determines how stars work. Stellar atmospheres and spectrum of light that emerges from stars.

## ASTR 450. Astrophysics of Star Systems (3)

Prerequisites: Credit or concurrent registration in Mathematics 342A and Physics 354.

Applications of physics in study of star clusters, the interstellar medium and galactic structure, galaxies, and cosmology.

## ASTR 496. Experimental Topics (3)

Selected topics. May be repeated once with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## ASTR 498A. Senior Project (1)

Prerequisite: A student's academic program must demonstrate that they are on track to graduate within one academic year.

Selection and design of individual projects.

## ASTR 498B. Senior Project (2)

Six hours of laboratory.
Prerequisite: Astronomy 498A.
Individual research project culminating in a final written report.

## ASTR 499. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
ASTR 510. Exoplanets (3)
Prerequisites: Astronomy 350 and 440, or Physics 350 and 354 with minimum grade of $\mathrm{B}-$, and consent of instructor.

Extrasolar planet detection; mass and radius determination; transits and eclipses; orbital dynamics and transit timing variations; internal and atmospheric characteristics; the exoplanet population and formation scenarios.

## ASTR 596. Advanced Topics in Astronomy (2-3)

Prerequisite: Consent of instructor.
Selected topics in astronomy or astrophysics. May be repeated with new content upon approval of instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296 , 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.

## Biology

## In the College of Sciences

OFFICE: Life Sciences 104
TELEPHONE: 619-594-6767
UNDERGRADUATE ADVISING OFFICE: Life Sciences 135
TELEPHONE: 619-594-6442 / FAX: 619-594-5676
WEBSITE: http://www.bio.sdsu.edu
Faculty
Emeritus: Archibald, Avila, Barnett, Baxter, Bernstein, Berta, Bizzoco, Bohnsack, Breindl, Carmichael, Carpenter, Chen, Clark, Collier B., Collier G., Cox, Deutschman, Dexter, Doran, Dowler, Ebert, Fisher, Ford, Franklin, Frey, Gottlieb, Hanscom, Hemmingsen, Huffman, Hurlbert, Johnson, Krekorian, McClenaghan, McGuire, Monroe, Neel, Norland, Paolini, P., Parsons, Perrault, Phleger, Plymale, Pozos, Ratty, Rinehart, Sabbadini, Shepard, Simpson, Tsoukas, Van Steenbergen, Wedberg, Williams, Zedler, J., Zedler, P., Zyskind
Chair: Zeller
Associate Chair: Hedin
Vice Chair: Harris
Professors: Anderson, Bohonak, Buono, Burns, Cripps, Dinsdale, Edwards, M., Edwards, R., Glembotski, Harris, Hedin, Hovel, Kelley, Lewison, Lipson, Long, Maloy, McClenaghan, Oechel, Reeder, Rohwer, Segall, Sussman, Waters, Welter, Wolkowicz, Zayas Ventura, Zeller
Associate Professors: Clark, Feuer, Hentschel, Kalyuzhnaya, Lai, Zona
Assistant Professors: Barber, Flores Renteria, Grainger, House, Luallen, Miller, Roach, Shikuma, Sukumaran, Xu
Lecturers: Ekdale, Garver, Martin, Norgard-Sumnicht, Paolini

## Offered by the Department

Doctor of Philosophy degree in biology, ecology, and evolutionary biology.
Master of Arts degree in biology.
Master of Science degree in biology.
Master of Science degree in microbiology.
Major in biology with the B.A. degree in
liberal arts and sciences.
Major in biology with the B.S. degree in applied arts and sciences.
Emphasis in cellular and molecular biology.
Emphasis in ecology.
Emphasis in evolutionary biology.
Emphasis in marine biology.
Emphasis in zoology.
Major in microbiology with the B.A. degree in liberal arts and sciences.
Major in microbiology with the B.S. degree in applied arts and sciences. Emphasis in clinical laboratory science.
Teaching major in biology in preparation for the single subject teaching credential in science/biology.
Minor in biology.
Certificate in biotechnology.

## The Majors

Biology. The Department of Biology offers a dynamic and modern program in biology which prepares students both academically and practically for vocations in science and science-related fields or for entry into graduate studies. The major is designed to present a basic background in modern biology and in the supportive disciplines of chemistry, mathematics and physics, and to provide specialized training selected by the student from a variety of areas. The wide range of faculty expertise and research interest allows the department to offer a curriculum which includes general and advanced courses in bioinformatics, ecology, endocrinology, entomology, evolutionary biology, genetics and physiology,
immunology, marine sciences, microbiology, molecular biology, and plant and animal sciences. Formal programs of study within the major include Emphases in Cell and Molecular Biology, Ecology, Evolutionary Biology, Marine Biology, and Zoology. Special studies opportunities with SDSU faculty and scientists at cooperating institutions allow qualified students to gain research experience on an individual basis.

The department offers a specific program of courses to fulfill the state of California's science requirements for the Single Subject Teaching Credential in Biological Science. Students successfully completing one of these programs may be certified by the department as having demonstrated subject competency as required in part for acceptance into College of Education single subject credential program.

The department also offers a program leading to the Biotechnology Certificate. The purpose of this program is to prepare undergraduate and graduate students for employment in public and private organizations utilizing biotechnology.

The rapid advances in theoretical and applied biology, the growing demands in health care and the expansion of general interest in and concern for the environment are just a few of the factors which continue to increase society's need for biologists. Some examples: a biology degree is the common precursor for the medical, dental, veterinarian and allied health professions; government agencies involved in environment protection, public health and conservation need ecologists, inspectors, laboratory technicians and wildlife, forest, coast and park managers; government and private agriculture agencies need entomologists and botanists; private companies, government laboratories and universities involved in biotechnology need microbiologists and molecular biologists; zoos, wild animal parks and aquaria need zoologists; the secondary school system needs biology teachers; textbook and scientific supply companies need science majors. Whether your goal is to work in a laboratory or a forest, there is opportunity for fulfillment and growth in the field of biology.

Microbiology. Microbiology is the study of bacteria, viruses, yeasts, molds, algae and protozoa. These microorganisms are found associated with plants and animals, in soil, and in fresh and marine waters. Many of the free-living species participate in maintaining the quality of our environment. Certain species affect the health and well-being of plants and animals, including humans, by causing infectious diseases. Microorganisms are often used in the molecular biology laboratory as research tools, for experiments in genetic engineering, and in the manufacture of food and chemicals.

The microbiology major is designed to provide the student with a background in basic biology, microbiology, and the disciplines of chemistry, mathematics and physics. The curriculum includes introductory and advanced courses (most with laboratories) in general and pathogenic microbiology, immunology, virology, physiology, and genetics as well as courses in food and industrial microbiology, marine microbiology, and molecular biology.

Microbiologists find positions with governmental agencies, in university and private research laboratories, in biotechnology, medical and industrial laboratories, in schools as teachers, with scientific supply companies, or with textbook companies. Depending on the situation, a microbiologist may conduct fundamental and applied research, identify disease-causing microorganisms in medical or veterinary specimens, participate in studies of the environment (e.g., soil, ocean, lakes), aid in the manufacture of pharmaceuticals, food, or beverages, or provide quality and safety control. The microbiology major is excellent preparation for entrance into medical, dental, veterinarian, and graduate schools. The Emphasis in Clinical Laboratory Science prepares students to become, after a postgraduate internship, licensed medical technologists or certified public health microbiologists.

## Advising

Students are required to meet with the undergraduate adviser and satisfy specific requirements in order to declare the major. Contact the biology advising office (LS-135) for admission criteria and procedures. All students admitted to the university with a declared major in biology are urged to meet with their undergraduate adviser within their first two semesters.

## Impacted Programs

The biology and microbiology majors are impacted programs. To be admitted to the biology or microbiology major, students must meet the following criteria:
a. Complete with a minimum GPA of 2.80 and a grade of $C$ (2.0) or better: Biology 203, 203L, 204, 204L, 215; Chemistry 200, 201, 232, 232L; and Mathematics 124. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Have a cumulative GPA of 2.80 or better;

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit https://sunspot.sdsu.edu/pubred/!mymap.disp for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Biology Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 04011) (SIMS Code: 771402)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in biology courses can apply to the degree.

A minor is not required with this major.
Preparation for the Major. Biology 203, 203L, 204, 204L, 215; Chemistry 200, 201, 232, 232L; Mathematics 124; Physics 180A, 180B, 182A, 182B. (37 units)

These preparation for the major courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a grade of $\mathrm{C}(2.0)$ or better in each course. These courses require a minimum GPA of 2.80 (excluding Physics 180A, 180B, 182A, 182B).

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 24 upper division units to include Biology $351,352,354,366,366$ L, Chemistry 365 , and seven units of elective courses. Elective courses include all upper division biology courses numbered 350 and above (except Biology 497 and 499), and all upper division chemistry courses (except Chemistry $300,308,497,499,560$ ). A minimum of two elective courses must be biology laboratory courses, at least one of which must be an organismal level course selected from Biology 350, 458, 512, 514, 515,516 A, $523,524,525,526,528,530,531,535$.

All courses not included above must have specific approval of the department.

All upper division transfer courses in biology will calculate in the major GPA but will not fulfill any major requirements without specific department approval. This approval must be filed with the Office of Advising and Evaluations.

Time Limitation. All courses for the major must be completed within seven years of the granting of the undergraduate degree. Exceptions for individual courses must be approved by the department and be filed with the Office of Advising and Evaluations.

## Biology Major

With the B.S. Degree in Applied Arts and Sciences

## (Major Code: 04011) (SIMS Code: 771401)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A minor is not required with this major.
Preparation for the Major. Biology 203, 203L, 204, 204L, 215; Chemistry 200, 201, 232, 232L; Mathematics 124; Physics 180A, 180B, 182A, 182B. (37 units)

These preparation for the major courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a grade of $\mathrm{C}(2.0)$ or better in each course. These courses require a minimum GPA of 2.80 (excluding Physics 180A, 180B, 182A, 182B).

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Biology 351, 352, 354, 366, 366L, Chemistry 365, and 19 units of elective courses. Elective courses include all upper division biology courses numbered 350 and above, Biology 497 and 499 (maximum six units), and all upper division chemistry courses (except Chemistry 300, 308, 497, 499, 560). A minimum of two elective courses must be biology laboratory courses, at least one of which must be an organismal level course selected from Biology 350, $458,512,514,515,516$ A, $523,524,525,526,528,530,531,535$.

All courses not included above must have specific approval of the department.

All upper division transfer courses in biology will calculate in the major GPA but will not fulfill any major requirements without specific department approval. This approval must be filed with the Office of Advising and Evaluations.

Time Limitation. All courses for the major must be completed within seven years of the granting of the undergraduate degree. Exceptions for individual courses must be approved by the department and be filed with the Office of Advising and Evaluations.

## Emphasis in Cellular and Molecular Biology (SIMS Code: 771433)

Preparation for the Major. Biology 203, 203L, 204, 204L, 215; Chemistry 200, 201, 232, 232L; Mathematics 124; Physics 180A, 180B, 182A, 182B. (37 units)

These preparation for the major courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a grade of $\mathrm{C}(2.0)$ or better in each course. These courses require a minimum GPA of 2.80 (excluding Physics 180A, 180B, 182A, 182B).

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Biology $351,352,354,366,366$ L, 567 , Chemistry 365 , and 15 units of electives selected from the courses listed below. At least two courses must be selected from Biology 350, 464, 480, 490, 510, 528, 549, 554, 556, 557, 562, 567L, 568 [or Bioinformatics and Medical Informatics 568], 570, 575,576, 584, 485 or 585, 589, 590, Chemistry 432, or Biology and Chemistry 496 and/or 596 (maximum three units). A minimum of two elective courses must be biology laboratory courses, at least one of which must be an organismal level course, selected from Biology 350, 458, 512, $514,515,516 A, 523,524,525,526,528,530,531$, or 535 . Other electives include all biology courses numbered 350 and above (except Biology 452), Biology 497 and 499 (maximum six units), and all upper division chemistry courses (except Chemistry 300, 308, 497, 499, and 560). Approval of the emphasis adviser is required for credit in Chemistry 498 and 499, Biology or Chemistry 496 and 596 and other courses not listed above to be included in the emphasis. This approval must be filed with the Office of Advising and Evaluations.

All upper division transfer courses in biology will calculate in the major GPA but will not fulfill any major requirements without specific department approval. This approval must be filed with the Office of Advising and Evaluations.

Time Limitation. All courses for the major must be completed within seven years of the granting of the undergraduate degree. Exceptions for individual courses must be approved by the department adviser and be filed with the Office of Advising and Evaluations.

## Emphasis in Ecology <br> (SIMS Code: 771434)

Preparation for the Major. Biology 203, 203L, 204, 204L, 215; Chemistry 200, 201, 232, 232L; Mathematics 124; Physics 180A, 180B, 182A, 182B. A computer programming course (e.g. Computer Science 107) is recommended. (37 units)

These preparation for the major courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a grade of $\mathrm{C}(2.0)$ or better in each course. These courses require a minimum GPA of 2.80 (excluding Physics 180A, 180B, 182A, 182B).

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Biology 351, 352, 354, 354L, 366, 366L, Chemistry 365, and 17 units of electives selected from the courses listed below. At least two courses must be selected from Biology 509, 512, 514, 516A, 516B, 517, 518, 526, 527, 527L, 528, 535, 540, 542, 544 [or Environmental Science 544], 560, 562, or Biology 496 and/or 596 (maximum three units). At least one course must be an organismal course selected from Biology 458, 512, 514, 515, 516A, 523, 524, 525, $526,528,530,531$, or 535 . Other electives include all biology courses numbered 350 and above (except Biology 452), Biology 497 and 499 (maximum six units), and all upper division chemistry courses (except Chemistry 300, 308, 497, 499, and 560). Approval of the emphasis adviser is required for credit in Biology 496, 596, and other courses not listed above to be included in the ecology electives. This approval must be filed with the Office of Advising and Evaluations.

All upper division transfer courses in biology will calculate in the major GPA but will not fulfill any major requirements without specific department approval. This approval must be filed with the Office of Advising and Evaluations.

Time Limitation. All courses for the major must be completed within seven years of the granting of the undergraduate degree. Exceptions for individual courses must be approved by the department adviser and be filed with the Office of Advising and Evaluations.

## Emphasis in Evolutionary Biology <br> (SIMS Code: 771439)

Preparation for the Major. Biology 203, 203L, 204, 204L, 215; Chemistry 200, 201, 232, 232L; Mathematics 124; Physics 180A, 180B, 182A, 182B. (37 units)

These preparation for the major courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a grade of $\mathrm{C}(2.0)$ or better in each course. These courses require a minimum GPA of 2.80 (excluding Physics 180A, 180B, 182A, 182B).

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Biology 351, 352, 354, 366, 366L, 509, Chemistry 365, and 16 units of electives selected from the courses listed below. At least two courses must be selected from Biology 458, 510, 512, 515, 518, $523,524,525,526,527,527 \mathrm{~L}, 528,530,531,568$ [or Bioinformatics and Medical Informatics 568], 576, or Biology 496 and/or 596
(maximum three units). A minimum of two elective courses must be biology laboratory courses, at least one of which must be an organismal level course, selected from Biology 458, 512, 515,523, $524,525,526,528,530$, or 531 . Other electives include all biology courses numbered 350 and above (except Biology 452), Biology 497 and 499 (maximum six units), and all upper division chemistry courses (except Chemistry 300, 308, 497, 499, and 560). Approval of the emphasis adviser is required for credit in Biology 496,596, and other courses not listed above to be included in the evolutionary biology electives. This approval must be filed with the Office of Advising and Evaluations.

All upper division transfer courses in biology will calculate in the major GPA but will not fulfill any major requirements without specific department approval. This approval must be filed with the Office of Advising and Evaluations.

Time Limitation. All courses for the major must be completed within seven years of the granting of the undergraduate degree. Exceptions for individual courses must be approved by the department adviser and be filed with the Office of Advising and Evaluations.

## Emphasis in Marine Biology

## (SIMS Code: 771436)

Preparation for the Major. Biology 203, 203L, 204, 204L, 215; Chemistry 200, 201, 232, 232L; Mathematics 124; Physics 180A, 180B, 182A, 182B. (37 units)

These preparation for the major courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a grade of C (2.0) or better in each course. These courses require a minimum GPA of 2.80 (excluding Physics 180A, 180B, 182A, 182B).

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Biology 351, 352, 354, 366, 366L, Chemistry 365, and 19 units of electives selected from the courses listed below. At least three courses must be selected from Biology 512, 514, 515, 516A, 516B, $517,518,542$, or Biology 496 and/or 596 (maximum three units). A minimum of two elective courses must be biology laboratory courses, at least one of which must be an organismal level course, selected from Biology 512,514, 515, or 516A. The remaining units must be selected from biology courses numbered 350 and above (except Biology 452), Biology 497 and 499 (maximum six units), and all upper division chemistry courses (except Chemistry 300, 308, 497, 499, and 560). Approval of the emphasis adviser is required for credit in Biology 496 and 596, and other courses not listed above to be included in the marine biology electives. This approval must be filed with the Office of Advising and Evaluations.

All upper division transfer courses in biology will calculate in the major GPA but will not fulfill any major requirements without specific department approval. This approval must be filed with the Office of Advising and Evaluations.

Time Limitation. All courses for the major must be completed within seven years of the granting of the undergraduate degree. Exceptions for individual courses must be approved by the department adviser and be filed with the Office of Advising and Evaluations.

## Emphasis in Zoology

## (SIMS Code: 771438)

Preparation for the Major. Biology 203, 203L, 204, 204L, 215; Chemistry 200, 201, 232, 232L; Mathematics 124; Physics 180A, 180B, 182A, 182B. (37 units)

These preparation for the major courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a grade of C (2.0) or better in each course. These courses require a minimum GPA of 2.80 (excluding Physics 180A, 180B, 182A, 182B).

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Biology 351, 352, 354, 366, 366L, Chemistry 365, and 19 units of electives selected from the courses listed below. At least three courses must be selected from Biology 509, 510, 512, 515, 516A, 518, 523, $524,525,526,527,527 \mathrm{~L}, 540,560,576$, or Biology 496 and/or 596 (maximum three units). A minimum of two elective courses must be biology laboratory courses, at least one of which must be an organismal level course, selected from Biology 512, 515, 516A, $523,524,525$, or 526 . The remaining units must be selected from biology courses numbered 350 and above (except Biology 452), Biology 497 and 499 (maximum six units), and all upper division chemistry courses (except Chemistry 300, 308, 497, 499, and 560). Approval of the emphasis adviser is required for credit in Biology 496, 596, and other courses not listed above to be included in the zoology electives. This approval must be filed with the Office of Advising and Evaluations.

All upper division transfer courses in biology will calculate in the major GPA but will not fulfill any major requirements without specific department approval. This approval must be filed with the Office of Advising and Evaluations.

Time Limitation. All courses for the major must be completed within seven years of the granting of the undergraduate degree. Exceptions for individual courses must be approved by the department adviser and be filed with the Office of Advising and Evaluations.

## Microbiology Major

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 04111) (SIMS Code: 771452)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in biology courses can apply to the degree.

A minor is not required with this major.
Preparation for the Major. Biology 203, 203L, 204, 204L, 215; Chemistry 200, 201, 232, 232L; Mathematics 124; Physics 180A, 180B, 182A, 182B. (37 units)

These preparation for the major courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a grade of C (2.0) or better in each course. These courses require a minimum GPA of 2.80 (excluding Physics 180A, 180B, 182A, 182B).

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. It is recommended that students select French, German, or Russian to satisfy this requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 30 upper division units to include Biology $350,351,352,354,366,366 \mathrm{~L}$, Chemistry 365 , and nine units of electives selected from the courses listed below. At least two courses must be selected from Biology 464, 480, 485 or 585 , 528, 549, 554, 556, 557, 562, 567, 567L, 568 [or Bioinformatics and Medical Informatics 568], 584, 590, Chemistry 432 or 432L. At least one of these courses must be a biology laboratory course. Other electives include all biology courses numbered 350 and above (except Biology 452, 497, and 499), and all upper division chemistry courses (except Chemistry 300, 308, 497, 499, and 560). Approval of the microbiology adviser is required for credit in Chemistry 498, Biology or Chemistry 496 and 596 and other courses not listed above to be included in the electives. This approval must be filed with the Office of Advising and Evaluations.

All upper division transfer courses in biology will calculate in the major GPA but will not fulfill any major requirements without specific department approval. This approval must be filed with the Office of Advising and Evaluations.
Time Limitation. All courses for the major must be completed within seven years of the granting of the undergraduate degree. Exceptions for individual courses must be approved by the department and be filed with the Office of Advising and Evaluations.

## Microbiology Major

With the B.S. Degree in Applied Arts and Sciences

## (Major Code: 04111) (SIMS Code: 771451)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A minor is not required with this major.
Preparation for the Major. Biology 203, 203L, 204, 204L, 215; Chemistry 200, 201, 232, 232L; Mathematics 124; Physics 180A, 180B, 182A, 182B. (37 units)

These preparation for the major courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a grade of C (2.0) or better in each course. These courses require a minimum GPA of 2.80 (excluding Physics 180A, 180B, 182A, 182B).
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Biology $350,351,352,354,366,366$ L, Chemistry 365 , and 15 units of electives selected from the courses listed below. At least four courses must be selected from Biology 464, 480, 485 or 585, 528, 549, 554, 556, 557, 562, 567, 567L, 568 [or Bioinformatics and Medical Informatics 568], 584, 590, Chemistry 432 or 432L. At least one of these courses must be a biology laboratory course. Other electives include all biology courses numbered 350 and above (except Biology 452), Biology 497 and 499 (maximum six units), and all upper division chemistry courses (except Chemistry 300, 308, 497, 499, and 560). Approval of the microbiology adviser is required for credit in Chemistry 498, Biology or Chemistry 496 and 596 and other courses not listed above to be included in the electives. This approval must be filed with the Office of Advising and Evaluations.

All upper division transfer courses in biology will calculate in the major GPA but will not fulfill any major requirements without specific department approval. This approval must be filed with the Office of Advising and Evaluations.
Time Limitation. All courses for the major must be completed within seven years of the granting of the undergraduate degree. Exceptions for individual courses must be approved by the department and be filed with the Office of Advising and Evaluations.

## Emphasis in Clinical Laboratory Science

 (SIMS Code: 771453)The emphasis in clinical laboratory science is a program of required and elective courses which prepares students for the Public Health Microbiologist and Clinical Laboratory Scientist academic certification and licensing examinations.
Preparation for the Major. Biology 203, 203L, 204, 204L, 215; Chemistry 200, 201, 232, 232L, 251; Mathematics 124; Physics 180A, 180B, 182A, 182B. (42 units)
These preparation for the major courses (excluding Chemistry 251) may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a grade of $C$ (2.0) or better in each course. These courses require a minimum GPA of 2.80 (excluding Chemistry 251, Physics 180A, 180B, 182A, 182B).
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Biology 350, 351, 352, 354, 366, 366L, 480, 485, 584, Chemistry 365 , and six units of electives selected from the courses listed below. At least two courses must be selected from Biology 464, $528,549,554,556,557,567 \mathrm{~L}, 590$, Chemistry 432. At least one of these courses must be a biology laboratory course. Other electives include all biology courses numbered 350 and above (except Biology 452), Biology 497 and 499 (maximum six units), and all upper division chemistry courses (except Chemistry 300, 308, 497, 499, and 560). Approval of the microbiology adviser is required for credit in Chemistry 498, Biology or Chemistry 496 and 596 and other courses not listed above to be included in the electives. This approval must be filed with the Office of Advising and Evaluations.

All upper division transfer courses in biology will calculate in the major GPA but will not fulfill any major requirements without specific department approval. This approval must be filed with the Office of Advising and Evaluations.

Time Limitation. All courses for the major must be completed within seven years of the granting of the undergraduate degree. Exceptions for individual courses must be approved by the department and be filed with the Office of Advising and Evaluations.

## Biology Major

In preparation for the Single Subject Teaching Credential in Science/Biological Sciences
With the B.S. Degree in Applied Arts and Sciences
(Major Code: 04011) (SIMS Code: 771405)
Students applying to the College of Education's graduate program for the Single Subject Teaching Credential in Science/Biological Sciences must be certified by this department for subject matter competency. This certification requires earning a grade of $B$ (3.0) or better in Biology 452 and either (1) passing the required examinations (CSET), or (2) completing the subject matter preparation program described below.

Certification through the accomplishment of appropriate coursework requires (1) completion of the courses described under the General Biology Degree Requirements, B.S. degree (preparation for the major and major) including the following electives in the major: Biology 354L, 436, 452,590*, and at least one course from Biology 458,515,523,524,525,526, 530 or 531 (it is recommended that Biology 497 or 499 be taken as electives for the major); (2) earning a grade of B (3.0) or better in Biology 452, (3) completing Geological Sciences 101, 104, and Physics 499 (History of Science and Technology). Teacher Education 280, Special Education 450, and Education 451 are recommended as Teacher Credential Program prerequisites. No coursework substitutions are permitted for the SSTC program of study. The Department of Biology credential adviser (LS-135) must be consulted for certification.

Please refer to the Teacher Education section of this catalog for other requirements and prerequisites for the credential program.

Time Limitation. All courses for the major must be completed within seven years of the granting of the undergraduate degree. Exceptions for individual courses must be approved by the department and be filed with the Office of Advising and Evaluations.

All courses not included above must have the prior approval of the department and the substitution filed with the Office of Advising and Evaluations.
*Biology 336 may be substituted for Biology 590 for SSTC/CSET waiver
requirements only. Biology 336 will not satisfy any degree requirements for the major.

## Biology Minor

The minor in biology consists of a minimum of 16 units to include Biology 204, 204L, and at least 12 units of upper division courses selected from one of the areas below. At least one of the selected courses must be a biology laboratory course numbered 350 or above. A maximum of three units of Biology 497 and 499 may be included in the minor with prior approval of the department. For courses requiring Biology 215 as a prerequisite, a college level course in statistics may be acceptable with the approval of the
instructor. Courses may be substituted for those in areas below with approval of the biology adviser, and this approval must be filed with the Office of Advising and Evaluations.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed at San Diego State University.

The minor in biology requires prerequisite courses that do not count towards the units in the minor. See descriptions of each area below.

## General Biology

## (SIMS Code: 771401)

Prerequisites: Biology 100, 100L or Biology 203, 203L and Chemistry 200. Required: Biology 204, 204L; 12 units of upper division biology to include at least two courses in ecology and evolution: Biology 315, 324, 327, 352, 354; at least one course in human biology: Biology 307 or 336 ; at least one upper division biology course with laboratory ( $2-4$ units): see course descriptions.

## Cellular and Molecular Biology <br> (SIMS Code: 771421)

Prerequisites: Biology 203, 203L, Chemistry 200, 201, 232, 232L, 365. Required: Biology 204, 204L, and at least 12 units of the following electives: Biology 350, 351, 352, 366, 366L, 480, 510, 528, 549, 554, 567, 568 [or Bioinformatics and Medical Informatics 568], 570,575,576,584,589,590, and 485 or 585 , and 556 or 557. At least one elective must be a laboratory course.

## Ecology

(SIMS Code: 771422)
Prerequisites: Biology 203, 203L, Chemistry 200. Required: Biology 204, 204L, 354, and at least nine units of the following electives: Biology 315, 324, 327, 354L, 509, 512, 514, 515, 516A, 517, 518, 523, 524, 525, 526, 527, 527L, 528, 531, 540, 542, 544 [or Environmental Science 544]. At least one elective must be a laboratory course.

## Evolutionary Biology

## (SIMS Code: 771423)

Prerequisites: Biology 203, 203L, Chemistry 200. Required: Biology 204, 204L, 352, and at least nine units of the following electives: Biology 509, 510, 512, 523, 524, 525, 526, 527, 527L, 530,531 . At least one elective must be a laboratory course.

## Marine Biology

## (SIMS Code: 771425)

Prerequisites: Biology 203, 203L, Chemistry 200. Required: Biology 204, 204L, 324 and at least nine units of the following electives: Biology 512, 514, 515, 516A, 517, 518, and 542. At least one elective must be a laboratory course.

## Plant Biology

## (SIMS Code: 771426)

Prerequisites: Biology 203, 203L, Chemistry 200. Required: Biology 204, 204L, 458 or 530 or 531 or 535. At least $8-9$ units of the following electives (to total 12 upper division units): Biology $458,530,531,535$. At least one elective must be a laboratory course.

## Biotechnology Certificate (SIMS Code: 771479)

Matriculated students must apply for admission to the program before completion of 15 certificate units and must complete all prerequisite and required courses with a GPA of 2.5 or better.

The certificate requires 13 prerequisite units - Biology 350, 366, 366L, Chemistry 365 and 25-29 certificate units including Biology 497 and/or 499 ( 5 units must be pre-approved by the certificate adviser), 567, 567L, 568 [or Bioinformatics and Medical Informatics 568], and three electives selected from Biology 510, 549, 554, 570, 575, 576, 584, 585, 589, 590, Chemistry 563, 564. Prerequisite and certificate courses may be utilized in the biology, chemistry, and microbiology majors and minors as appropriate.

## Courses (BIOL)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

## BIOL 100. General Biology (3) [GE]

Prerequisite recommended: Concurrent registration in Biology 100L.

A beginning course in biology stressing processes common to living organisms. Not applicable to biological sciences majors; see Biology 203, 203L, 204, 204L. Not open after Biology 203 or 204.

## BIOL 100L. General Biology Laboratory (1) [GE]

Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Biology 100.
A laboratory course in biology stressing processes common to living organisms. Not applicable to biological sciences majors; see Biology 203, 203L, 204, 204L. Not open after Biology 203L or 204L.

## BIOL 101. World of Animals (3) [GE]

Animal adaptation and diversity and their relationship to the development of evolutionary theory. Not applicable to biological sciences majors. Not open after Biology 203, 204.
BIOL 101L. World of Animals Laboratory (1) [GE]
Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Biology 101.
Laboratory course on evolution and diversity of animals involving field trips and laboratory investigations. Not applicable to biological sciences majors. Not open after Biology 203L, 204L.
BIOL 203. Principles of Cell and Molecular Biology (3)
Prerequisites: Credit or concurrent registration in Chemistry 200 or 202 and satisfaction of the SDSU Written Communication Assessment requirement.

Principles of biology applying to all organisms, including basic biochemistry, cell structure, membrane transport, energy metabolism, cell division, classical and molecular genetics, gene expression, development, and recombinant DNA.

## BIOL 203L. Principles of Cell and Molecular Biology Laboratory (1)

Three hours of laboratory.
Prerequisites: Credit or concurrent registration with a grade of $C$ (2.0) or better in Biology 203 and satisfaction of the SDSU Written Communication Assessment requirement.

Laboratory experiences designed to demonstrate and reinforce concepts presented in lecture through active scientific investigation and experiences in observing, identifying, describing, and explaining evolution of cellular processes, and in applying laboratory methods and procedures relevant to molecular biology.

## BIOL 204. Principles of Organismal Biology (3)

Prerequisite: Satisfaction of the SDSU Written Communication Assessment requirement. Recommended: Completion of Biology 203 and 203L.

Principles of biology applying to all organisms, including systematics and diversity of bacteria, protista, fungi, plants and animals, and concepts of physiology, reproduction, development and differentiation, ecology and the causes of endangerment of a species.

## BIOL 204L. Principles of Organismal Biology Laboratory (1)

Three hours of laboratory.
Prerequisites: Credit or concurrent registration with a grade of $C$ (2.0) or better in Biology 204 and satisfaction of the SDSU Written Communication Assessment requirement. Recommended: Completion of Biology 203 and 203L.

Laboratory experiences demonstrate and reinforce concepts and descriptive information presented in lecture through active scientific investigation and experience in observing, identifying, and classifying life, in analyzing the structural features of life, and in evaluating their adaptive significance.

## BIOL 211. Fundamentals of Microbiology (2)

Prerequisites: Biology 100 or 203 and 203L; or a grade of $B$ (3.0) or better in high school biology. Credit or concurrent registration in Chemistry 100 or 102 or 130.

Microorganisms of the environment, including disease-producing organisms, their actions and reactions. For nursing, nutrition, and kinesiology (prephysical therapy) majors. Not applicable to biological sciences majors; see Biology 350.

## BIOL 211L. Fundamentals of Microbiology Laboratory (2)

Three hours of laboratory and two hours of activity.
Prerequisite: Credit or concurrent registration with a grade of $C$ (2.0) or better in Biology 211.

Fundamentals of microbiology, including study of bacteria, fungi, protozoa, and algae of environment, including disease-producing organisms, their actions and reactions.

## BIOL 212. Human Anatomy (4)

Two lectures and six hours of laboratory.
Prerequisite: Grade of $C(2.0)$ or better in Biology 100, 203, or 211.
Gross and microscopic anatomy of organ system of human body.
BIOL 215. Biostatistics (3) [GE]
Two lectures and three hours of laboratory.
Prerequisites: Credit or concurrent registration in Biology 203, 203 L or 204, 204L and Mathematics 124, 141, or 150.

Methods and experience in defining and solving quantitative problems in biology, including design of experiments, and parametric and nonparametric statistical techniques. Students with credit or concurrent registration in the following lower division courses will be awarded a total of four units for the two (or more) courses: Biology 215; Administration, Rehabilitation and Postsecondary Education 201; Civil Engineering 160; Economics 201; Linguistics 270; Political Science 201; Psychology 280; Sociology 201; Statistics 119, 250.
BIOL 246. Colloquium in Biomedical Sciences (1)
Prerequisite: University level biology course.
Current biomedical research projects ranging from cell biology to behavioral research. Research paper required. Maximum credit two units.

## BIOL 247. Advanced Degree Programs in the Sciences: <br> Application Strategies (1) $\mathrm{Cr} / \mathrm{NC}$

Two hours of activity.
Prerequisite: Junior or senior standing.
Instruction in preparing competitive applications to sciences' M.S. and Ph.D. degree programs to include development of the required personal statement. Introduction to sources of financial support, such as national fellowship programs, and development of interview skills and materials. Maximum credit one unit for any combination of Biology 247, 248, 249.

## BIOL 248. Careers in Biological Sciences (1) $\mathrm{Cr} / \mathrm{NC}$

Career opportunities in biological sciences. Specialists in major biological areas will present information about their fields and how best to prepare for careers. Maximum credit one unit for any combination of Biology 247, 248, 249.

## BIOL 249. Career Choices in the Health Professions (1) Cr/NC

Career opportunities in allied health professions; trends in health care; discussion of medical ethics; practicing professionals will present about their fields and how best to prepare for careers in their area of health care. Maximum credit one unit for any combination of Biology 247, 248, 249.

## BIOL 250. Preprofessional Topics (1) Cr/NC

Designed to expose the preprofessional student to the profession of his/her choice through speakers and selected readings. Emphasis on alternatives and meeting stresses as a preprofessional student. Maximum credit one unit for any combination of Biology 250A-250B-250C.
A. Topics in Medicine.
B. Topics in Dentistry.
C. Topics in Veterinary Medicine.

## BIOL 251. Human Anatomy Internship (2)

Six hours of laboratory.
Prerequisites: Biology 212 and consent of instructor.
Interns will master the material from human anatomy, develop and teach study skills, and apply skill set for administering a laboratory course in human anatomy. Maximum credit four units.

## BIOL 261. Human Physiology (4)

Three lectures and three hours of laboratory.
Prerequisites: Biology 212. Credit or concurrent registration in Chemistry 102 (or Chemistry 100 and credit or concurrent registration in Chemistry 130).
Human function viewed from cellular through organ system levels of organization. Intended primarily for prenursing students. Not applicable to biological sciences majors. Not open to students with credit in Biology 336, 436, or 590.

## BIOL 291C. Biostatistics Laboratory (1)

Prerequisites: Recommendation by department and consent of instructor.

Special laboratory course designed for biology majors with credit in a statistics course other than Biology 215.

## BIOL 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## BIOL 299. Special Study (1-3)

Individual research experience and interaction with researchers at an introductory level. Projects involve approximately 45 hours of laboratory or fieldwork per unit and a research report. Hours are flexible and arranged between the student and the researcher. Maximum credit four units.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
Writing Requirement: Completion of the Graduation Writing Assessment Requirement or the eligibility to enroll in an upper division writing course is a prerequisite for all upper division biology courses numbered 450 and above.
BIOL 307. Biology of Sex (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A.2. Life Sciences. If a biological science course is not taken to satisfy General Education II.A.2. Life Sciences, a college course in biological science is required.

Reproductive adaptations in humans, and comparatively in other species. Topics include sex differences, mate choice and mating behavior, fertility regulation, fertilization and embryonic development, sex ratios, parental investment, effects of aging, and life history strategies. Not applicable to biological sciences majors.

## BIOL 315. Ecology and Human Impacts on the

Environment (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A.2. Life Sciences. If a biological science course is not taken to satisfy General Education II.A.2. Life Sciences, a college course in biological science is required.

Ecological characteristics of natural ecosystems and basic effects of human society upon those systems, emphasizing resource management, food production, global environmental problems, and future directions. Not applicable to biological sciences majors.

## BIOL 317. World of Dinosaurs (3) [GE]

Prerequisite: Upper division standing.
Current theories and controversies surrounding the evolution and extinction of dinosaurs for non-science majors. Not applicable to biological sciences majors.

## BIOL 324. Life in the Sea (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A.2. Life Sciences. If a biological sciences course is not taken to satisfy General Education II.A.2. Life Sciences, a college course in biological sciences is required.

Overview of complexity of marine life. Diverse interactions of organisms in the intertidal zone, over the continental shelves and in the open oceans. Current controversies concerning the marine biosphere. Not applicable to biological sciences majors.

BIOL 327. Conservation of Wildlife (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A.2. Life Sciences. If a biological sciences course is not taken to satisfy General Education II.A.2. Life Sciences, a college course in biological sciences is required.

Global ecosystems and their dynamics, with emphasis on sustainable human use and preservation of biodiversity. Not applicable to biological sciences majors. Not open to students with credit in Biology 540 .

## BIOL 335. The Human Body (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A.2. Life Sciences.

Survey of human body with emphasis on intricacy of design and integration of various organ systems. Not open to nursing or exercise and nutritional sciences majors, or to students with credit in any college-level human physiology or anatomy course. Not applicable to biological sciences majors. (Formerly numbered Biology 341.)

## BIOL 336. Principles of Human Physiology (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A.2. Life Sciences. If a biological sciences course is not taken to satisfy General Education II.A.2. Life Sciences, a college course in biological sciences is required.

Systems of the human body, their interrelationships and control systems which regulate them. Not open to students with credit in a college course in human physiology. Not applicable to biological sciences majors.
BIOL 340A. Preventive Dentistry Program (1) Cr/NC
Four hours of clinical and other activities.
Prerequisites: Upper division standing and active predental file in the Preprofessional Health Advising Office.

Participation in clinic, dental observation, marketing activities and two field trips. Maximum credit four units. Not applicable to biological sciences majors.

## BIOL 340B. Preventive Dentistry Leaders (2-4)

Four hours of activity per unit.
Prerequisites: Biology 340A and consent of instructor.
Supervision of one component of Preventive Dentistry Program. Maximum credit six units. Not applicable to biological sciences majors.

## BIOL 350. General Microbiology (4)

Two lectures and six hours of laboratory.
Prerequisites: Biology 203, 203L, 204, 204L; Chemistry 232, 232L.

Actions and reactions of microorganisms in response to their environment, both natural and as changed by other organisms, including man. Also includes an introduction to pathogens.

## BIOL 351. Genetics (3)

Two lectures and two hours of activity.
Prerequisites: Biology 203, 203L, 204, 204L, 215.
"Faulty" genes, genetic variation, human disorders. Big data, molecular, and transmission genetics.

## BIOL 352. Evolution (3)

Two lectures and two hours of activity.
Prerequisites: Biology 203, 203L, 204, 204L.
Principles of population genetics and evolutionary biology.
BIOL 354. Ecology and the Environment (3)
Two lectures and one hour of discussion.
Prerequisites: Biology 203, 203L, 204, 204L, 215. Credit or concurrent registration in Mathematics 124.
Fundamental concepts in population, community, and ecosystem ecology.
BIOL 354L. Experimental Ecology (2)
One hour of discussion and three hours of laboratory.
Prerequisites: Credit or concurrent registration in Biology 354.
Methods of research in ecology; approaches to analysis of populations, communities, and ecosystems.

## BIOL 366. Cell and Molecular Biology (3)

Prerequisites: Biology 203 and 203L. Limited to Biology and Microbiology majors, Biology minors, and Chemistry majors with Emphasis in Biochemistry, SIMS Codes: 771401-771452 and 772609.

Fundamental processes of cell biology with an emphasis on cellular and molecular mechanisms common to eukaryotic organisms.
BIOL 366L. Biochemistry, Cell and Molecular Biology Laboratory I (2)
Six hours of laboratory.
Prerequisite: Credit or concurrent registration in Biology 366.
Basic laboratory approaches in biochemistry, cell biology, and molecular biology.
BIOL 436. Human Physiology Laboratory (2)
One lecture and three hours of laboratory.
Prerequisite: Credit or concurrent registration in Biology 336 or 590.

Human physiology and rationale of current week's laboratory and experimental outcomes of previous week's laboratory. Not open to students with credit in Biology 261.
BIOL 452. Science Concept Development and Integration (3)
Two lectures and three hours of activity.
Prerequisite: Senior standing, or participation in the science single subject credential program.

Development and integration of biological science content knowledge, introduction to learning theory, and transformation of knowledge. Designed for students preparing for the single subject teaching credential in life sciences.

## BIOL 458. Plant Biology (4)

Three lectures and three hours of laboratory.
Prerequisites: Biology 203, 203L, 204, 204L.
Cell biology and structure, photosynthesis, respiration, secondary metabolism, physiology of water relations and transport, growth and development, evolution of major groups, plant ecology of Southern California and topics related to agriculture.
BIOL 464. Functional Genomics Laboratory (2)
Six hours of laboratory.
Prerequisites: Biology 366 and 366L.
Practical research experience in cell and molecular biology using animal model of tissue regeneration. Analysis of gene expression, gene inhibition approaches, image data analysis, microscopy techniques, molecular genetic techniques.

## BIOL 480. Clinical Hematology (3)

Prerequisites: Biology 203 and Chemistry 365 or 560. Recommended: Credit or concurrent registration in Biology 366 or Chemistry 563.

Theoretical and practical background for study of normal and pathological blood cells to include laboratory techniques. Course meets State of California requirements as a hematology course for students entering training programs in clinical laboratory sciences.
BIOL 485. Principles of Immunology (3)
Prerequisites: Biology 203, 203L, Chemistry 365, credit or concurrent registration in Biology 366. Recommended: Biology 350.

Basic areas of immunology to include inflammation, generation of immune response, antibody production, lymphocyte development and function, hypersensitivities and AIDS, major histocompatibility complex and cytokines. Designed to give a basic background in the immune system.
BIOL 490. Undergraduate Honors Research (3)
Prerequisites: Admission to the major with GPA of at least 3.20 and 15 units completed in the major. Two previous semesters of advanced upper division research in biology. Consent of instructor and undergraduate adviser.

Experience in designing and carrying out independent research in a laboratory setting plus a written record of experimental design and results in the form of an honors research thesis to be defended before a committee. Does not satisfy laboratory requirement in major. Maximum credit three units.
BIOL 496. Experimental Topics (1-4)
Selected topics. May be repeated once with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

BIOL 497. Undergraduate Research (1-3)
Fifty hours of research per unit.
Prerequisites: Admission to the major with GPA of at least 2.70 and nine units completed in the major. Consent of instructor and undergraduate adviser.

Independent research project supervised by faculty. Data analysis and written or oral presentation of results. Maximum credit six units.

## BIOL 499. Special Study (1-3)

Fifty hours of activity per unit.
Prerequisites: Admission to the major with GPA of at least 2.70 and nine units completed in the major. Consent of instructor and undergraduate adviser.

Individual study, internship, other supervised laboratory or field project or experience. Credit involves 50 hour activity per unit per semester. Written or oral presentation of results required. Maximum credit six units.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

Writing Requirement: Completion of the Graduation Writing Assessment Requirement or the eligibility to enroll in an upper division writing course is a prerequisite for all upper division biology courses numbered 450 and above.

## BIOL 509. Advanced Evolution (3)

Two lectures and two hours of activity.
Prerequisite: Biology 352.
Evolutionary biology including genetics of populations, speciation, systematic biology, adaptation, role of development in evolution, evolution of behavior, and comparative biology. Evolutionary biology as the central organizing principle of biology.

## BIOL 510. Molecular Evolution (3)

Prerequisites: Biology 352 and 366 or graduate standing.
Molecular evolution including concepts of homology and convergence, the nearly neutral theory of evolution, evolution of new protein function, detecting selection, multi-gene family evolution and evolutionary genomics.
BIOL 512. Evolution and Ecology of Marine Mammals (3)
Two lectures and three hours of laboratory.
Prerequisites: Biology 352 and 354.
Biology of marine mammals including pinniped, cetacean and sirenian evolution, diet and foraging strategies, social organization, reproductive strategies, echolocation, diving physiology, and conservation.

## BIOL 514. Biology of the Algae (4)

Three lectures and three hours of laboratory.
Prerequisites: Biology 203, 203L, 204, 204L and six units of upper division coursework in the major.

Evolution, life histories, morphology, physiology, and ecology of micro and macro algae, with attention to both marine and freshwater taxa, and of sea-grasses.

## BIOL 515. Marine Invertebrate Biology (4)

Two lectures and six hours of laboratory.
Prerequisites: Biology 203, 203L, 204, 204L. Strongly recommended: Completion of three to six upper division units in the major.

Structure and function, ecology, behavior, physiology and phyletic relationships of marine invertebrate animals.
BIOL 516A. Marine Larval Ecology Research Part 1 (4)
Three lectures and three hours of laboratory.
Prerequisites: Biology 203, 203L, 204, 204L, 215.
Biology of marine invertebrate larvae. Biodiversity, evolution of complex life cycles, larval culture techniques, physiological and ecological consequences of environmental variability during larval development. Designing and peer reviewing original research proposals related to larval ecology.
BIOL 516B. Marine Larval Ecology Research Part 2 (4)
Three lectures and three hours of laboratory.
Prerequisites: Biology 516A and consent of instructor.
Research experience investigating marine invertebrate larval ecology.

BIOL 517. Marine Ecology (3)
Two lectures and three hours of laboratory.
Prerequisite: Biology 354.
Ecological concepts as applied to pelagic and benthic marine organisms and their environment. Field and laboratory experience in oceanographic techniques, particularly the coastal environment.

## BIOL 518. Biology of Fishes (4)

Three lectures and three hours of laboratory.
Prerequisite: Biology 354.
Ecology, anatomy, physiology, evolution, taxonomy, environmental constraints, habitats, feeding, behavior, growth, reproduction, biotic interactions, population dynamics, and assemblage structure. Fisheries biology concepts to include stock-recruitment models, density dependence and population regulation, management of fisheries, and conservation. Not open to students with credit in Biology 520 and 541 .

## BIOL 523. Herpetology (3)

Two lectures and three hours of laboratory.
Prerequisites: Biology 203, 203L, 204, 204L. Recommended: Biology 352.

Evolution, systematics, distribution, and ecology of amphibians and reptiles of the world.

## BIOL 524. Ornithology (4)

Two lectures, six hours of laboratory or field excursions, and a field project.

Prerequisites: Biology 203, 203L, 204, 204L. Strongly recommended: Completion of three to six upper division units in the major.

Study and identification of birds, especially those of the Pacific Coast and the San Diego region.

## BIOL 525. Mammalogy (3)

Two lectures and three hours of laboratory.
Prerequisites: Biology 203, 203L, 204, 204L. Strongly recommended: Completion of three to six upper division units in the major.

Evolution, systematics, distribution and ecology of mammals of the world.

## BIOL 526. Terrestrial Arthropod Biology (4)

Two lectures and six hours of laboratory.
Prerequisites: Biology 203, 203L, 204, 204L. Strongly recommended: Biology 352 and completion of three to six upper division units in the major.

Structure, function, behavior, ecology, evolution, and relationships of major groups of terrestrial arthropods, including insects, arachnids, and myriapods. Identification and natural history of southern California diversity.

## BIOL 527. Animal Behavior (3)

Prerequisites: Biology 203, 203L, 204, 204L, 215; Psychology 211 and 260 for psychology majors.

Biological bases of animal behavior with emphasis on ethological approach, including evolution and adaptive significance of behavior.

## BIOL 527L. Animal Behavior Laboratory (1)

Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Biology 527.
Animal behavior with emphasis on ethological approach to include evolution and adaptive significance of behavior, data collection and analysis, scientific writing and results.

## BIOL 528. Microbial Ecology (3)

Two lectures and three hours of laboratory.
Prerequisites: Biology 203, 203L, 204, 204L. Recommended: Biology 350 and 354.
Roles of microorganisms in soil, aquatic and marine ecosystems, microbial adaptations to the environment, and interactions within microbial communities and between microbes and multicellular organisms. Laboratory techniques to isolate and study microbes.

BIOL 530. Plant Systematics (4)
Two lectures and six hours of laboratory, field trips.
Prerequisites: Biology 203, 203L, 204, 204L. Strongly recommended: Completion of three to six upper division units in the major.

Plant description, identification, classification, and nomenclature with emphasis on evolutionary patterns, interdisciplinary data acquisition, and phylogenetic analysis.
BIOL 531. Taxonomy of California Plants (4)
Two lectures and six hours of laboratory.
Prerequisites: Biology 203, 203L, 204, 204L.
Fundamentals of plant taxonomy with emphasis on identification of plants native and naturalized to California. Plant collecting techniques. Field trips are required.

## BIOL 535. Plant Ecology (4)

Three lectures and three hours of laboratory.
Prerequisites: Biology 203, 203L, 204, 204L. Strongly recommended: Biology 354.

Plant adaptation and response to living and non-living environment including aspects of plant evolution, demography, ecophysiology community and ecosystem dynamics and soil-plant relationships. Terrestrial systems emphasized.
BIOL 540. Conservation Ecology (3)
Two lectures and three hours of laboratory.
Prerequisite: Biology 354.
Human impacts on ecosystems, the resultant endangerment and extinction of plant and animal species, and strategies for the protection and recovery of threatened forms.
BIOL 542. Ecological Signaling in the Environment (3)
Prerequisites: Biology 354 and Chemistry 201.
Ecological consequences of species interactions mediated by signals in terrestrial and aquatic ecosystems. Evaluating primary literature and conveying science to a broad audience.
BIOL 544. Terrestrial Ecosystems and Climate Change (3)
(Same course as Environmental Science 544)
Prerequisite: Biology 354.
Controls on fluxes and stocks of nutrients within terrestrial ecosystems, ecosystem responses, feedbacks to climate change. Climate systems, water transport, production and decomposition, nutrient cycling, stable isotopes, spatial and temporal integration.
BIOL 549. Microbial Genetics and Physiology (3)
Prerequisite: Biology 350 or 366 .
Physiology of microbial growth, bacterial structure and function, genetics of bacteriophages and bacteria.
BIOL 554. Molecular Virology (3)
Prerequisites: Biology 366 and Chemistry 365.
Molecular aspects of structure, genetics, and replication of viruses, virus-host interactions, pathogenesis of virus infections, diagnostic virology, and antiviral vaccines and drugs; emphasis on human pathogens.
BIOL 556. Scanning Electron Microscopy Laboratory (2)
Six hours of laboratory.
Prerequisites: Biology 204, 204L, and Physics 180B.
Biological specimen preparation and operation of scanning electron microscope.
BIOL 557. Transmission Electron Microscopy Laboratory (3)
One lecture and six hours of laboratory.
Prerequisites: Biology 204, 204L, and Physics 180B.
Biological sample preparation and operation of transmission electron microscope.
BIOL 560. Animal Physiology (3)
Prerequisites: Biology 203, 203L, 204, 204L; Chemistry 365; Physics 180B, 182A, and 182B.

Physiology of vertebrate and invertebrate animals with emphasis on diversity of solutions to physiological problems and on functional integration of organ systems.

BIOL 562. Ecological Metagenomics (3)
Two lectures and three hours of laboratory.
Prerequisites: Credit or concurrent registration in Biology 354 and 366.

Next generation DNA sequencing technology with emphasis on ecological applications in microbial communities. Metagenomic analysis of taxonomic identification, physiological function, and the ecological role of the microbial community in the broader ecosystem.
BIOL 567. Advanced Biochemistry, Cellular, and Molecular Biology (4)
Prerequisites: Biology 366 and Chemistry 365.
Advanced concepts of cellular biology, molecular biology, and biochemistry.
BIOL 567L. Biochemistry, Cellular, and Molecular Biology Laboratory II (2)
Six hours of laboratory.
Prerequisites: Biology 366 and 366L. Recommended: Biology 350.

Intermediate laboratory approaches to biochemistry, cellular biology, and molecular biology at a level appropriate for both advanced undergraduate and graduate students.

## BIOL 568. Bioinformatics (3)

(Same course as Bioinformatics and
Medical Informatics 568)
Two lectures and three hours of laboratory.
Prerequisite: Biology 366.
Bioinformatics analysis methods and programming skills. Practical bioinformatic software for sequence analysis, bioinformatic algorithms and programming fundamentals.
BIOL 570. Neurobiology (3)
Prerequisite: Biology 366 or 590 or Psychology 360 for psychology majors.

Structure and function of the nervous system to include cellular and molecular mechanisms underlying neuronal excitability and synaptic function, nervous system development, cellular and systems analysis of sensory, motor and higher brain functions. Emphasis on experimental approaches.
BIOL 575. Molecular Basis of Heart Disease (3)
Prerequisite: Biology 366 or 590.
Current literature on the molecular basis of disordered physiology leading to heart disease.
BIOL 576. Developmental Biology (3)
Prerequisite: Biology 366. Strongly recommended: Biology 567. Fundamental processes of development from fertilized egg to organism. Emphasis on cellular and molecular mechanisms common to development of metazoan organisms.

## BIOL 584. Medical Microbiology (3)

Prerequisites: Biology 350 and 366.
Major bacterial and viral pathogens; molecular mechanisms of pathogenesis, microbial toxins and antimicrobial agents; immune response to microbial infections; biochemical and molecular diagnostics.
BIOL 585. Cellular and Molecular Immunology (3)
Prerequisite: Biology 366. Recommended: Credit or concurrent registration in Biology 567 and 567L.

Cellular and molecular aspects of the immune response. Genetics of immunoglobulins, major histocompatibility complex, lymphocyte development and their manifestations on immune responsiveness, lymphokines immunopathologies including AIDS, and contemporary immunological techniques. Not open to students with credit in Biology 485.
BIOL 589. Stem Cell and Regenerative Biology (3)
Prerequisites: Biology 366 and credit or concurrent registration in Biology 366L.

Stem cell basics, cloning, tissue engineering, research on animal models of regeneration, political and ethical issues surrounding stem cell debate.

## BIOL 590. Physiology of Human Systems (4)

Three lectures and one hour of discussion.
Prerequisites: Biology 366, Chemistry 365, Physics 180B, 182B.
Human physiology presented at both cellular and organ system levels; neurophysiology, muscle physiology, cardiovascular physiology and respiration, kidney function, hormone function and reproduction. For students majoring in a natural science or pre-professional studies.

## BIOL 596. Special Topics in Biology (1-4)

Prerequisite: Consent of instructor.
Advanced selected topics in modern biology. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.

## Brazilian Studies

Offered by the College of Arts and letters

OFFICE: Arts and Letters 600
TELEPHONE: 619-594-5431 / FAX: 619-594-6281
E-MAIL: cal@sdsu.edu
WEBSITE: http://cal.sdsu.edu

## Faculty

The Brazilian studies certificate is administered by the Behner Stiefel Center for Brazilian Studies and draws on courses offered by faculty in the following areas: Africana Studies, Anthropology, Arts and Letters, History, International Business, Journalism and Media Studies, Latin American Studies, Philosophy, Portuguese, Religious Studies, and Sociology.
Director: Erika M. Robb Larkins (Anthropology and Sociology)

## Brazilian Studies Certificate

(SIMS Code: 115703)
The basic certificate in Brazilian studies allows students to complement their course of study in traditional majors with interdisciplinary coursework on Brazil. Students gain multiple perspectives on current social, political, and economic dynamics in Brazil; learn to recognize diverse aspects of Brazilian culture including music, cinema, and religion and discuss Brazilian political and economic systems and relate them to regional and global contexts.

The certificate requires 12 units to include Arts and Letters 222 and nine units selected from Africana Studies 300, 320, 351 [or Religious Studies 351], 421, 472; Anthropology 443; International Business 410; Journalism and Media Studies 454; Latin American Studies 306 [or Portuguese 306], 307 [or Portuguese 307], 325, 415 [or History 415], 496, 553 [or History 553], 556 [or History 556]; Philosophy 360; Religious Studies 406; Sociology 411.

Students must obtain a grade of C (2.0) or better in each of the certificate courses. Visit https://brazil.sdsu.edu or contact the Behner Stiefel Center for Brazilian Studies (brazilprogram@ sdsu.edu) to enroll in the certificate program or for additional information.

# Business Administration 

OFFICE: Education and Business Administration 448
TELEPHONE: 619-594-5828
WEBSITE: https://business.sdsu.edu/undergrad
A Member of the AACSB International-The Association to Advance Collegiate Schools of Business.

## Faculty

Faculty assigned to teach in Business Administration are drawn from departments in the Fowler College of Business.

## Offered by the College

Master of Business Administration degree.
Master of Business Administration degree for executives.
Master of Science degree in business administration.
Master of Business Administration degree and Juris Doctor degree.
Master of Business Administration and Master of Arts in Latin American studies degrees (concurrent program).
Major in general business with the B.S. degree in business administration.
Minor in business administration.
Certificate in business administration.

## The Majors

Business administration offers a major in General Business that is open to all students, including students who have completed the approved Transfer Model Curriculum in Business. For additional majors, minors, additional programs, and courses in the Fowler College of Business, see listings under Accountancy, Finance, Management, Management Information Systems, and Marketing.

## General Business Major

Business refers to the multitude of activities required to accomplish commercial transactions in society. Included in the process of business are management activities designed to direct, organize, and lead the processes needed to accomplish transactions; marketing activities designed to facilitate the exchanges that constitute transactions; financial activities designed to provide for and support the capital needed for transactions to occur; information system activities designed to plan and organize the processes required to ensure activity; and accounting activities designed to monitor and audit overall business activity.

The General Business major provides an overview and fundamental working knowledge of the varied aspects of business. Students receive a broad and generalized understanding of the function of business and how the various sub-disciplines of business interact to contribute to the success of an organization. Students select courses across all business sub-disciplines, obtaining an understanding of the field of business. Courses are selected within a particular sub-discipline to develop specialized knowledge of a particular area of business.

Positions available to graduates with a General Business major are those that require a broad, overarching understanding of the business function, rather than a specialized knowledge within a particular business sub-discipline. Examples are in retailing, sales, and other service industries.

## Business Honors Program

The Business Honors Program offers excellent upper division business students the opportunity to explore issues in our local, regional, and global business environments focusing on the social and ethical responsibility that business has to the community and society. Honors students will enroll in a one unit business honors seminar each semester. During their enrollment they will participate in activities to promote their academic and personal growth, documenting their work in a written portfolio.

Generally, students should apply to this program at the time of application to upper division business. Applicants must submit an essay with their application. Applicants must have a 3.6 cumulative GPA or good standing in the Weber Honors College. Students
not meeting these requirements may petition for admission to the program. Successful completion of the Business Honors Program will be recognized at graduation. Contact Dr. Robert A. Judge, Department of Management Information Systems, for more information about this program.

## Statement on Computers

Before enrolling in upper division courses in the Fowler College of Business, students must be competent in the operation of personal computers, including word processing and spreadsheets. Business students are strongly encouraged to have their own computers capable of running word processing, spreadsheet, presentation, e-mail, and Internet applications such as those found in packages sold by major software publishers. Availability of on-campus computing resources can be limited due to increasing demand across the university.

## Retention Policy

The Fowler College of Business expects that all business students will make reasonable academic progress towards the degree. Business premajors who have earned 60 units but have less than a 2.9 may be removed from the premajors and placed in undeclared. Upper division business majors earning less than a 2.0 average in their major GPA for two consecutive semesters may be removed from business and placed in undeclared.

## Transfer Credit

Lower Division: Courses clearly equivalent in scope and content to San Diego State University courses required for minors or as preparation for all business majors will be accepted from regionally accredited United States institutions and from foreign institutions recognized by San Diego State University and the Fowler College of Business.

Upper Division: It is the policy of the San Diego State University Fowler College of Business to accept upper division transfer credits where (a) the course content, requirements, and level are equivalent to San Diego State University courses and (b) where the course was taught in an AACSB International-The Association to Advance Collegiate Schools of Business-accredited program. Exceptions require thorough documentation evidencing the above standards.

## Impacted Program

All majors in the Fowler College of Business are impacted. Before enrolling in any upper division courses in business administration, students must advance to an upper division business major and obtain a business major code. To be admitted to an upper division business major (accounting, finance, financial services, general business, real estate, information systems, management, or marketing), students must meet the following criteria:
a. Complete with a grade of $C$ (2.0) or better: Accountancy 201, 202; Economics 101, 102; Finance 240 (or an approved business law course); Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290 (RWS 290 is not required for the accounting major); and either Statistics 119 or Economics 201. These courses cannot be taken for credit/no credit (Cr/ NC);
b. Complete a minimum of 60 transferable semester units;
c. Have a cumulative GPA of 2.9.

Students who meet all requirements except the GPA may request to be placed on the waiting list. While all spaces are usually filled by eligible students, if there is room in the program after all the fully qualified students have been accommodated, students will be admitted from the waiting list in GPA order. Contact the Fowler Center for Student Success (EBA-448), 619-594-5828, for more information.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## General Business Major

With the B.S. degree in Business Administration
(Major Code: 05011) (SIMS Code: 221751)
(SIMS Code: 221752 - SDSU Global Campus)
The General Business major is open to all students, including students who have completed the California Community College Associate in Science in Business for Transfer (AS-T) degree completing the Transfer Model Curriculum (TMC) for business. The General Business major is also offered fully online through admission to the SDSU Global Campus business degree completion program. For additional information, students can go to https:// business.sdsu.edu/online.

A minor is not required with this major.
Preparation for the Major. Complete with a grade of C (2.0) or better: Accountancy 201, 202; Economics 101, 102; Finance 240 (or an approved business law course); Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290; and either Statistics 119 or Economics 201. (27 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$; the minimum grade in each class is C . Additional progress requirements must be met before a student is admitted to the upper division general business major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. Thirty-nine to 40 upper division units consisting of Business Administration 300, 310, 323, 350, 360, 370. Business Administration 404, 405, or 458 (three units); Accountancy 325 or 326; three units selected from Finance 321, 326, 327, 328, 329, and 331 ; three units selected from Management 352, 357, 358; three units selected from Management Information Systems 306, 315 , and 380; four units selected from Marketing 371, 372, 373, 376,377 ; six to seven units selected from 400-level and 500-level courses in the Fowler College of Business. A "C" (2.0) average or better is required in the courses stipulated here for the major.

## Business Administration Minor

(Minor Code: 05010) (SIMS Code: 221750)
(See also, minors in Accounting, Entrepreneurship, Finance, Information Systems, Management, Marketing, and Real Estate.)

The minor in business administration provides a general overview of business for non-business majors. While it is open to qualified students from all majors (except majors in the Fowler College of Business, Hospitality and Tourism Management, or International Business), it is particularly recommended for students whose career plans include self-employment or small business management. The minor in business administration is administered by the Fowler Center for Student Success (EBA448), 619-594-5828.

Admission to the minor in business administration requires completion of at least 60 units with a minimum GPA of 2.9 or better and completion of Accountancy 201 and Management Information Systems 180 with grades of C (2.0) or better.

The minor in business administration consists of a minimum of 21 to 23 units to include Business Administration 323, 350, 370; Accountancy 201; Management Information Systems 180; and six to eight units selected from Finance 327, 328; Management 352, 358; Marketing 371, 373, 476.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Students must meet the prerequisites for the minor in effect at the time that they declare the minor. Contact the Fowler Center for Student Success (EBA-448) for admissions criteria and procedures.

## Business Administration Certificate <br> (SDSU Imperial Valley Only) <br> (SIMS Code: 221703)

This certificate is designed primarily for persons who want to gain an increased understanding of essential principles through upper division business courses, and for students who decide to go on to pursue the B.S. degree with a major in either management, finance, accounting, marketing, information systems, or real estate at the San Diego campus. For those not seeking the B.S. degree it provides a program designed to give self-improvement opportunities for the purpose of securing employment, promotion or upward mobility on the job.

All students seeking admission to the program must have successfully completed 56 transferable lower division units with a grade point average of 2.0 . This includes completion of the lower division preparation required for any business administration major, i.e., Accountancy 201, 202; Economics 101, 102; Finance 240; Management Information Systems 180; Mathematics 120 (or an approved calculus course); Rhetoric and Writing Studies 290; and Statistics 119 or Economics 201.

The certificate will be awarded upon successful completion of the following courses: Business Administration 323, 350, 370; Business Administration 360 or Management Information Systems 301; and three units selected from Finance 321, 589; or Management 444. (15 units)

## Courses (B A)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

B A 100. Exploration of Business (1) $\mathrm{Cr} / \mathrm{NC}$
Prerequisite: Member of Fowler College of Business learning community.

Business careers and business education. Skills needed, opportunities, and options within various occupations. Study and interpersonal skills for academic and personal success. Special sessions featuring campus resources to include library, advising, health and wellness services.

## B A 299. Special Study (1-4)

Prerequisites: Consent of department chair and instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Intended for Undergraduates)

## B A 300. Ethical Decision Making in Business (1)

Prerequisite: Approved upper division business major or another major approved by the Fowler College of Business. Proof of completion of prerequisite required: Copy of transcript.

Theoretical concepts and dimensions of ethics in business decisions. Ethics of decision alternatives using different approaches and philosophies, with application of an integrative ethical decision model to cases from various business subdisciplines.

## B A 310. Foundations of Business in a Global Environment (1)

 Prerequisite: Approved upper division major.Introduction to the program of study leading to the Bachelor of Science in Business Administration. Integration of various business disciplines to accomplish strategic goals. Presentation of the concept of global awareness, one of the fundamental pillars of global competency necessary in today's business world.

## B A 311. Lavin Entrepreneur I Seminar (1) Cr/NC

Prerequisite: Admission to Lavin Entrepreneur Program.
Lavin entrepreneurs will be introduced to entrepreneurship as a potential path for future career development. Students will begin developing entrepreneurial competencies, professional networks, and be introduced to the basics of ideation, opportunity recognition, and business model development.

## B A 312. Lavin Entrepreneur II Seminar (1) $\mathrm{Cr} / \mathrm{NC}$

Prerequisite: Business Administration 311.
Lavin entrepreneurs will continue building their entrepreneurial competencies and mindset, utilizing entrepreneurship frameworks for business opportunity assessment, ideation, and feasibility analysis techniques in ventures, and how to interact and negotiate with strategic partners.

## B A 323. Fundamentals of Finance (3)

Prerequisites: Approved upper division business major, business minor, or another major approved by the Fowler College of Business. For approved business majors, credit or concurrent registration in Business Administration 310. Proof of completion of prerequisites required: Copy of transcript.

Objectives of financial management. Financing the business enterprise. Internal financial management. Introduction to the cost of capital, valuation, dividend policy, leverage, international finance, and the techniques of present value and its applications. Sources of capital. (Formerly numbered Finance 323.)

## B A 350. Management and Organizational Behavior (3)

Prerequisite: For approved business majors, credit or concurrent registration in Business Administration 310. Proof of completion of prerequisite required: Copy of transcript.

Human behavior at individual, interpersonal, and group levels including effect of organization structure on behavior. Emphasis on managerial roles, historical evolution of management, ethics, and behavior in multicultural contexts. (Formerly numbered Management 350.)

## B A 360. Introduction to Operations and Supply Chain Management (3)

Prerequisites: Statistics 119 or Economics 201. Recommended: Mathematics 120. Approved upper division business major, business minor, or another major approved by the Fowler College of Business. For approved business majors, credit or concurrent registration in Business Administration 310. Proof of completion of prerequisites required: Copy of transcript.

Managerial concepts and quantitative methods associated with the design, execution, and management of operations and supply chain systems. (Formerly numbered Management Information Systems 302 and Information and Decision Systems 302.)

## B A 370. Marketing (3)

Prerequisites: Approved upper division business major, business minor, or another major approved by the Fowler College of Business. For approved business majors, credit or concurrent registration in Business Administration 310. Proof of completion of prerequisites required: Copy of transcript.

Function of marketing in organizations and society. Strategic marketing planning in domestic and global settings to include marketing concepts, consumer behavior, market research, product planning, pricing, distribution, promotion, and influence of the external environment on marketing decisions. (Formerly numbered Marketing 370.)

## B A 400. Business Honors Seminar (1) Cr/NC

Prerequisite: Admission to the Fowler College of Business Honors Program.

Current issues affecting local, national, and global business environments. Maximum credit five units.

## B A 401. Business Internship (1) $\mathrm{Cr} / \mathrm{NC}$

Prerequisite: Approved upper division business major, business minor, or another major approved by the Fowler College of Business.

Internships with business firms, non-profit organizations, or government agencies. Work done under joint supervision of intern organization and academic supervisor. Not applicable for credit in the major. Maximum credit four units with new content.
B A 402. Exploration of Business Career Development (1) $\mathrm{Cr} / \mathrm{NC}$ Prerequisite: Upper division standing in the Fowler College of Business.

Prepare students for careers after college and transition from college to career. Personal preparation and analysis of identification of best career options for each student.

## B A 404. Small Business Consulting (3)

Prerequisites: Approved upper division business major; Business Administration 300, 310, 323, 350, 370; Business Administration 360 or Management Information Systems 301; and consent of instructor.

Counseling of existing small businesses. Application of principles from all fields of business administration. Maximum credit six units.

## B A 405. International Business Strategy and Integration (3)

Prerequisites: Business Administration 300, 323, 350, 370, Business Administration 360 or Management Information Systems 301. Proof of completion of prerequisites required: Copy of transcript.

Integration of business administration principles and concepts for strategy design, implementation, and control in domestic, and global markets. Establishment of top management policy emphasized through case studies, experiential exercises, and simulations. (Formerly numbered Management 405.)

## B A 411. Lavin Entrepreneur III Seminar (1) Cr/NC

Prerequisite: Business Administration 312.
Lavin entrepreneurs will focus on implementing learned entrepreneurial competencies into refined business models, refining start-up opportunities through customer iteration and development. Understand data metrics, successful customer interaction, and pivoting the business model toward success.

## B A 412. Lavin Entrepreneur IV Seminar (1) Cr/NC

Prerequisite: Business Administration 411.
The final deliverable of this capstone course in presenting an iterated business model canvas to potential investors. Lavin entrepreneurs have the potential, knowledge, and tools to launch a company, bring their viable business opportunity to life.

## B A 458. Management Decision Games (1-3)

Prerequisites: Consent of instructor. Approved upper division business major; Business Administration 300, 310, 323, 350, 370; Business Administration 360 or Management Information Systems 301. Proof of completion of prerequisites required: Copy of transcript.

Integrated managerial decision making within a dynamic environment through the use of business games.
B A 496. Selected Topics in Business Administration (1-4)
Prerequisite: Consent of department chair.
Selected areas of concern in business administration. May be repeated with new content with consent of department chair. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

## B A 498. Investigation and Report (1-3)

Prerequisites: Senior standing and consent of instructor.
A comprehensive and original study of a problem connected with business administration under the direction of one or more members of the Fowler College of Business staff. May be repeated with new content. Maximum credit six units.

GRADUATE COURSES
Refer to the Graduate Bulletin.

## Chemistry

In the College of Sciences

OFFICE: Geology/Mathematics/Computer Science 209
TELEPHONE: 619-594-5595 / FAX: 619-594-4634
E-MAIL: cheminfo@sdsu.edu
WEBSITE: http://www.sci.sdsu.edu/chemistry
Certified by the American Chemical Society.

## Faculty

Emeritus: Carrano, Chatfield, Cobble, Dahms, Grubbs, Jones, Joseph, Landis, Lebherz, Mathewson, Metzger, O'Neal, Richardson, Ring, Roeder, Stewart, Stumph, Woodson
Chair: Tong
Professors: Cooksy, Grotjahn, Huxford, Roberts, Tong
Associate Professors: Bergdahl, Cole, Gustafson, Harrison,
Holland, Love, Pullman, Purse, Smith, Swairjo, van der Geer
Assistant Professors: Forsberg, Gu, Komperda,
Lee, Sohl, Yan
Offered by the Department of Chemistry and Biochemistry
Doctor of Philosophy degree in chemistry.
Master of Arts degree in chemistry.
Master of Science degree in chemistry.
Major in chemical physics with the B.S. degree
in applied arts and sciences.
Major in chemistry with the B.S. degree in applied arts and sciences with the Certificate of the American Chemical Society. Emphasis in biochemistry.
Major in chemistry with the B.A. degree in liberal arts and sciences, with or without the Certificate of the American Chemical Society.
Teaching major in chemistry in preparation for the single subject teaching credential in science/chemistry.
Emphasis in integrated teacher education program (ITEP-SS).
Minor in chemistry.

## The Major

Through the study of chemistry, students can better understand their environment and develop new materials that provide for a higher quality of life. Chemists are involved in a wide range of careers in research, development and the production of new goods. Basic chemical research provides society with discoveries of new substances and the means to predict their chemical and physical properties. In developmental chemistry, professionals find ways to put them to use. There are careers in methods of production to provide these materials to society in a cost-effective way. In each of these areas, there are subspecialties in analytical, biochemical, inorganic, organic, or physical chemistry.

The Department of Chemistry and Biochemistry offers five degree programs leading to the Bachelor of Arts degree, the Bachelor of Science degree, the Master of Arts degree, the Master of Science degree, and the Doctor of Philosophy degree (with the University of California, San Diego).

There are several options available in the undergraduate program for those wishing either a major or a minor in chemistry. A chemistry major with the Bachelor of Science degree and certificate of the American Chemical Society is designed to qualify students for many types of positions as chemists and for admission to graduate study.

The chemistry major with the Bachelor of Arts degree and certificate of the American Chemical Society is specifically designed to prepare students for careers and graduate work requiring a strong chemistry background. With an appropriate choice of electives, graduates can meet the requirements for admission to medical, dental and pharmaceutical schools. A minor in biology is recommended.

The use of chemistry electives allows a student to focus on a particular area in chemistry such as analytical chemistry, biochemistry, chemical physics, inorganic chemistry, organic chemistry, or physical chemistry.

## Impacted Program

The chemistry major is an impacted program. To be admitted to the chemistry major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.
d. For the chemistry major with an emphasis in integrated teacher education program (ITEP-SS), students must have a minimum cumulative GPA of 2.67 .
To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Chemistry Major

With the B.S. Degree in Applied Arts and Sciences and Certificate of the American Chemical Society
(Major Code: 19051) (SIMS Code: 772601)
All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A minor is not required with this major.
Preparation for the Major. Chemistry 200, 201, 232, 232L, 251; Mathematics 150, 151, 252; and Physics 195, 195L, 196, 196L. (39 units) Recommended: Physics 197 and 197L.

Students completing the California Community College Associate in Science in Chemistry for Transfer (AS-T) will satisfy preparation for the major. If Chemistry 251 and Mathematics 252 were not completed prior to matriculation, it must be completed at SDSU.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Chemistry 410A, 410B, 417, 427, 432, 432L, 457, 520A-520B, 550, 560, one unit of 498 , and eight units of upper division electives in chemistry. Six of the eight units may be in related subjects with the approval of the department.

## Emphasis in Biochemistry

## (SIMS Code: 772609)

Preparation for the Major. Chemistry 200, 201, 232, 232L, 251; Biology 203, 203L or Biology 204, 204L; Mathematics 150, 151, 252; Physics 195, 195L, 196, 196L. (43 units) Recommended: Physics 197 and 197L.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Chemistry 410A, 410B, 432, 432L, 457, 550, 560, 567; four units selected from Chemistry 562, 563, 564; one unit of Chemistry 498; and the remaining units selected from Chemistry 496, 497, 498, and any 500-level chemistry course; Biology 350, 352, 485, 549, 570, 590. The addition of Chemistry 417, 427, and 520A qualifies this program for ACS certification.

## Chemistry Major

With the B.A. Degree in Liberal Arts and Sciences and Certificate of the American Chemical Society

## (Major Code: 19051) (SIMS Code: 772612)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 49 units in chemistry courses can apply to the degree.

A minor is not required with this major.
Preparation for the Major. Chemistry 200, 201, 232, 232L, 251; Mathematics 150,151, 252; Physics 195, 195L, 196, 196L. (39 units) Recommended: Physics 197 and 197L.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of this catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 30 upper division units in chemistry to include Chemistry 410A, 410B, 417, 427, 432, 432L, 457, 520A, 550,560 ; one unit of Chemistry 498, and five units of electives selected from Chemistry 496, 498, or any 500-level course in chemistry.

## Chemistry Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 19051) (SIMS Code: 772602)
All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in chemistry courses can apply to the degree.

Preparation for the Major. Chemistry 200, 201, 232, 232L, 251; Biology 203, 203L; Mathematics 150, 151, 252; Physics 195, 195L, 196, 196L. (43 units) Recommended: Physics 197 and 197L.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of this catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 24 upper division units in chemistry to include Chemistry 410A, 410B, 417, 432, 432L, 457, 550, and seven units of electives in chemistry. Chemistry 560 is recommended for all premedical students.

Minor. A minor in biology is expected for preprofessional students.

## Chemistry Major

In preparation for the Single Subject Teaching Credential in Science/Chemistry
With the B.A. Degree in Applied Arts and Sciences
(Major Code: 19051) (SIMS Code: 772607)
One of the requirements for acceptance into the College of Education's post-baccalaureate credential program is to either pass the appropriate CSET examinations or complete an approved academic program. The single subject teaching credential in science preparation program described below satisfies the academic requirements for a student planning to teach integrated science and chemistry at the secondary level. Entrance into the post-baccalaureate credentialing program in part requires certification of subject matter competency by this department. This certification requires completion of the academic program with the required grades, submission of a satisfactory portfolio, and the recommendation of the department. Contact the subject matter preparation program adviser. In addition, all candidates for a Single Subject Teaching credential at San Diego State University must complete the requirements outlined in the catalog under Teacher Education or Dual Language and English Learner Education. Contact the School of Teacher Education or the Dual Language and English Learner Education Department for up-to-date information on prerequisites.

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A minor is not required for this major.
Preparation for the Major. Biology 203, 203L, 204, 204L; Chemistry 200, 201, 232, 232L, 251; Communication 103; Mathematics 150, 151; Physics 180A, 180B, 182A, 182B; Mathematics 252 OR Physics 195, 195L, 196, 196L, 197, 197L; Teacher Education 211B. (51 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 32 upper division units to include Chemistry 410A, 410B, 417 or $457,432,432 \mathrm{~L}, 498$ (1 unit), 520A, 550, 560; Astronomy 310; Geological Sciences 412; Physics 499 (History of Science and Technology).

## Additional Requirements for Subject Matter

## Preparation Certification

Satisfactory Grades. At most one course with a C- or lower among the courses listed under Preparation for the Major, and at most one course with a C- or lower among the courses listed under the Major. If a course is repeated, the highest grade will count.

Formative Assessment. Completion of a satisfactory, preliminary portfolio two semesters prior to graduation. Contact the subject matter preparation adviser for information.

Summative Assessment. Completion of a satisfactory, final portfolio and a positive recommendation from the senior project supervisor.

## Emphasis in Integrated Teacher Education Program (ITEP-SS)

## (Major Code: 19051) (SIMS Code: 772608)

This emphasis combines the degree and credential into a four year integrated teacher education program. The program is designed to qualify the student for a chemistry degree and a preliminary single subject teaching credential in science: chemistry.

A minor is not required with this major.
Impacted Program. The emphasis in integrated teacher education program (ITEP-SS) is an impacted program. To be admitted, refer to the specific impaction criteria for the major.

Preparation for the Major. Chemistry 200, 201, 232, 232L, 251; Biology 203; Communication 103; Mathematics 150, 151, 252; Physics 195, 195L, 196, 196L; Teacher Education 170 [or Child and Family Development 170], 211B, 280. (50 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 8 or above before
taking Teacher Education 405W* and earn a grade of $C$ (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 26 upper division units to include Chemistry 410A, 410B, 417, 432, 432L; Geological Sciences 412; Philosophy 332 [or Sustainability 332]; Teacher Education 331, 405W*.

Additional Requirements for Subject Matter Preparation Certification. Certification of subject matter competency by the Department of Chemistry and Biochemistry requires completion of all preparation for the major and major courses with the required grades. (At most one course with a C- or lower among the courses listed under preparation for the major, and at most one course with a C- or lower among the courses listed under the major is permitted. If a course is repeated, the highest grade will count.) Certification must be achieved before student teaching.

ITEP Admission Requirements. Students apply for admission to the chemistry major with an emphasis in integrated teacher education program (ITEP-SS) during the spring semester of their sophomore year. Students who qualify for admission the summer prior to their junior year must have a GPA of 2.67 or better, passing scores on the CBEST, a documented field experience, and complete program application.

Credential Requirements (32 units): Education 484, 970 (1 unit); Special Education 450; Teacher Education 303 (3 units), 903 (1 unit), 914C, 924C (3 units), 933, 954 (3 units), 963 (9 units).
*Required of all single subject ITEP majors regardless of Writing Proficiency Assessment score

## Chemical Physics Major

With the B.S. Degree in Applied Arts and Sciences
(Major Code: 19081) (SIMS Code: 772801)
All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." Individual master plans for each student are filed with the chemistry and physics undergraduate advisers and the Office of Advising and Evaluations.

A minor is not required with this major.
Preparation for the Major. Chemistry 201, 202, 232, 232L, 251; Mathematics 150, 151, 252; Physics 195, 195L, 196, 196L, 197, 197L. (42 units)

Recommended: A course in computer programming.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Chemistry 410A, 410B, 417, 550; Mathematics 342A, 342B; Physics 311, 350, 400A, 410; three units selected from Chemistry 432, 432L, 457, 510, Physics 357, 360, 400B, Chemistry 538 [or Physics 538]; and Research Project: Chemistry 497 (3 units) or Chemistry 498 (3 units) or Physics 498A and 498B (3 units).

## Chemistry Minor

## (Minor Code: 19051) (SIMS Code: 772601)

The following courses are prerequisite to the chemistry minor and do not count toward the 15 units required for the minor: Chemistry 200, 201. (10 units.)

The minor in chemistry consists of 15 units in chemistry to include Chemistry 232, 232L, 251; and six units of upper division electives. Strongly recommended: Chemistry 410A, 410B*.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

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## Courses (CHEM)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

## CHEM 100. Introduction to General Chemistry with

 Laboratory (4) [GE]Three lectures and three hours of laboratory.
Elementary principles of chemistry used to illustrate nature and development of modern scientific thought. Not open to students with credit in Chemistry 105 or 200.
CHEM 102. Introduction to General, Organic, and Biological Chemistry (5) [GE]
Four lectures and three hours of laboratory.
Prerequisite: High school chemistry or Chemistry 100.
Concepts of general, organic, and biological chemistry necessary to understanding human biochemistry and pharmacology, including chemical bonding, stereochemistry, acidity, thermodynamics, carbohydrates, lipids, enzymes, proteins, and nucleic acids. Open only to students applying for entrance to the nursing major.

## CHEM 130. Elementary Organic Chemistry (3)

Prerequisite: Chemistry 100 or 200.
Introduction to compounds of carbon including both aliphatic and aromatic substances. Not open to students with credit in Chemistry 231 or 232.

## CHEM 160. Introductory Biochemistry (3)

Prerequisite: Chemistry 130.
Fundamental principles of the chemistry of life. This course is intended primarily for majors in nutrition and related fields. Not applicable for admission to the School of Nursing.

## CHEM 200. General Chemistry (5)

Three lectures, one hour of discussion, and three hours of laboratory.

Prerequisites: Knowledge of introductory chemistry as demonstrated by completion of Chemistry 100 with a grade of $C$ (2.0) or better; or satisfaction of the SDSU Mathematics/Quantitative Reasoning Assessment requirement and qualification on the Chemistry Department Placement Examination.

General principles of chemistry with emphasis on inorganic materials.
CHEM 201. General Chemistry (5)
Three lectures, one hour of discussion, and three hours of laboratory.

Prerequisite: Chemistry 200 or 202 with a grade of $C$ (2.0) or better.

Continuation of Chemistry 200. General principles of chemistry with emphasis on fundamentals of chemical reactions.
CHEM 202. General Chemistry for Engineers (4)
Three lectures and three hours of laboratory.
Prerequisites: Knowledge of introductory chemistry as demonstrated by completion of Chemistry 100 with a grade of $C$ (2.0) or better; or satisfaction of the SDSU Mathematics/Quantitative Reasoning Assessment requirement and qualification on the Chemistry Department Placement Examination.

General principles of chemistry with emphasis on inorganic and physical chemistry and chemistry basics for engineers. Not open to students with credit in Chemistry 200. Restricted to chemical physics and engineering majors.
CHEM 210. Chemical Applications of Calculus and Physics (1)
Chemical problems that utilize calculus and physics relevant to upper division chemistry. Chemical rate laws, chemical thermodynamics, and molecular quantum mechanics. Recommended if a grade of C- (1.7) or below was received in Mathematics 150, 151, 252, Physics 195, or 196.
CHEM 232. Organic Chemistry (3)
Prerequisites: Chemistry 201 with a grade of $C$ (2.0) or better and credit or concurrent registration in Chemistry 232L.

Properties and synthesis of organic compounds including reaction mechanisms. Same course as lecture portion of Chemistry 231. Not open to students with credit in Chemistry 231.

## CHEM 232L. Organic Chemistry Laboratory (1)

Three hours of laboratory.
Prerequisites: Chemistry 201 with a grade of $C(2.0)$ or better and credit or concurrent registration in Chemistry 232.

Properties and synthesis of organic compounds including methods of separation and purification techniques. Same course as laboratory portion of Chemistry 231 . Not open to students with credit in Chemistry 231.

## CHEM 251. Analytical Chemistry (5)

Three lectures and six hours of laboratory.
Prerequisites: Chemistry 201 and credit or concurrent registration in Mathematics 124 or 150.

Introduction to the theory and practice of analytical chemistry including gravimetric, volumetric, and instrumental methods.

## CHEM 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.
CHEM 299. Special Study (1-4)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

CHEM 300. Forensic Science (3) [GE]
Prerequisite: Chemistry 100 or completion of General Education requirement in Foundations of Learning II.A. Natural Sciences and Quantitative Reasoning.

Techniques and case studies of mysteries solved by molecular analysis: chemical and DNA analysis of crime scenes, biochemical explanations of mysterious deaths and accidents, molecular hallmarks of forgery, chemical methods in crime deterrence, chemical causes of fires and structure failure. Not applicable to chemistry majors.

## CHEM 308. Chemistry as a Unifying Science (3) [GE] (Offered only at SDSU-IV)

Prerequisite: Completion of the General Education requirement in Foundations II.A., Natural Sciences and Quantitative Reasoning. Atomic-molecular theory of matter; use of concepts of chemistry to explain observable phenomena in everyday life, including physical properties and chemical changes; connections between chemistry and biology, earth science, and physical science. Open only to liberal studies majors. Not applicable to chemistry majors.
CHEM 365. Fundamentals of Biochemistry (3)
Prerequisites: Biology 203, 203L and Chemistry 232, 232L.
Basic concepts of modern integrated biochemistry, cell and molecular biology. Not open to students with credit in Chemistry 560. Applicable to chemistry major or minor only with approval from department.

## CHEM 410A. Physical Chemistry (4)

Three lectures and three hours of laboratory.
Prerequisites: Chemistry 232, 232L, 251; Mathematics 252; Physics 195, 195L, and 196, 196L. Recommended: Physics 197 and 197L. For chemistry teaching major only: The mathematics and physics requirements may be replaced by Mathematics 150, 151, 252 and Physics 180A, 180B OR Mathematics 150, 151, and Physics 195, 195L, 196, 196L. Mathematics and physics prerequisites must be completed with a grade of $C$ (2.0) or better in each course; if any were completed with a grade of less than a $C$ (2.0), concurrent registration in Chemistry 210 is required.

Theoretical principles of chemistry with emphasis on mathematical relations. Theory and practice in acquisition and statistical analysis of physical measurements on chemical systems.

## CHEM 410B. Physical Chemistry (3)

Three lectures.
Prerequisites: Chemistry 232, 232L, 251, 410A.
Theoretical principles of chemistry with emphasis on mathematical relations. Theory and practice in acquisition and statistical analysis of physical measurements on chemical systems.

## CHEM 417. Advanced Physical Chemistry Laboratory (2)

Six hours of laboratory.
Prerequisites: Chemistry 251, 410A, and credit or concurrent registration in Chemistry 410B.

Experimental physical chemistry. Emphasis on interpretation and statistical evaluation of instrument-derived results, record keeping, report writing, and individual initiative in observing results.

## CHEM 427. Inorganic Chemistry Laboratory (1)

Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Chemistry 520A.

Laboratory course designed to introduce students to techniques used in synthesis, characterization, and manipulation of inorganic compounds and materials.

## CHEM 432. Organic Chemistry (3)

Prerequisites: Chemistry 232 with a grade of $C$ (2.0) or better and credit or concurrent registration in Chemistry 432L.

Continuation of Chemistry 232. Same course as lecture portion of Chemistry 431. Not open to students with credit in Chemistry 431.
CHEM 432L. Organic Chemistry Laboratory (1)
Three hours of laboratory.
Prerequisites: Chemistry 232L with a grade of C (2.0) or better and credit or concurrent registration in Chemistry 432.

Continuation of Chemistry 232L. Same course as laboratory portion of Chemistry 431. Not open to students with credit in Chemistry 431.

## CHEM 457. Instrumental Methods of Chemical

Analysis Laboratory (2)
Six hours of laboratory.
Prerequisites: Chemistry 251, 432, 432L, and credit or concurrent registration in Chemistry 410 B ; concurrent registration in Chemistry 550.

Application of instrumental methods of chemical separations and analysis frequently used in all disciplines of chemistry.

## CHEM 496. Selected Topics in Chemistry (1-4)

Prerequisite: Consent of instructor.
Selected topics in modern chemistry. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Maximum credit six units.
CHEM 497. Undergraduate Research (1-3) Cr/NC
Prerequisites: Chemistry 232, 232L, 251.
Individual laboratory investigation. Maximum credit six units applicable to all chemistry major and minor degrees.

## CHEM 498. Senior Project (1-3)

Prerequisite: Three one-year courses in chemistry.
Individual literature and/or laboratory investigation and report on a problem. Maximum credit three units.

## CHEM 499. Special Study (1-4)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
CHEM 510. Advanced Physical Chemistry (3)
Prerequisite: Chemistry 410B.
Problems in chemical thermodynamics, statistical mechanics, chemical kinetics, quantum chemistry and molecular structure and spectroscopy, with applications.
CHEM 520A-520B. Inorganic Chemistry (3-3)
Prerequisite: Chemistry 410A. Chemistry 520A is prerequisite to 520B.

Nature of chemical bond and an advanced systematic study of representative and transition elements and their compounds.

CHEM 530. Physical Organic Chemistry (3)
Prerequisites: Chemistry 410B, 432.
Attractive and repulsive interactions between molecules, experimental methods and applications. Kinetic and thermodynamic analysis of reaction mechanisms and noncovalent binding. Qualitative molecular orbital theory, strain and stability, structure and bonding of organic molecules. Not open for post-baccalaureate credit or to students with credit in Chemistry 730.

## CHEM 531. Synthetic Organic Chemistry (3)

Prerequisites: Chemistry 432, 432L.
Modern methods, strategies, and mechanisms in advanced organic synthesis. Retrosynthetic analysis of and synthetic routes towards biologically important compounds. Not open for post-baccalaureate credit or to students with credit in Chemistry 731.
CHEM 532. Mechanism of Pharmaceutical Synthesis (3)
Prerequisites: Chemistry 410B, 432.
Organic reactions and mechanisms frequently used in the pharmaceutical industry. Not open for post-baccalaureate credit or to students with credit in Chemistry 732.
CHEM 534. Organometallics (1-3)
Prerequisites: Chemistry 410A or 432; 457, 550.
Advanced or special topics in organometallic chemistry and applications to organic chemistry. Not open for post-baccalaureate credit or to students with credit in Chemistry 734.

## CHEM 536. Spectroscopic Characterization of Organic

 Compounds (3)Prerequisite: Chemistry 432 with a grade of $C(2.0)$ or better. Organic compounds using physical and spectroscopic methods. Establishment of purity and yields. Not open for post-baccalaureate credit or to students with credit in Chemistry 736.

## CHEM 538. Polymer Science (3)

(Same course as Physics 538)
Prerequisites: Chemistry 200 or 202; and credit or concurrent registration in Chemistry 410B or Physics 360 or Mechanical Engineering 350 .
Structure, synthesis, physical properties, and utilities of polymers and biopolymers.
CHEM 550. Instrumental Methods of Chemical Analysis (2)
Prerequisites: Chemistry 232, 232L, and credit or concurrent registration in Chemistry 410A; credit or concurrent registration in Chemistry 457 for undergraduate students only. Chemistry majors in the teaching credential program (BA in Applied Arts and Sciences) can replace Chemistry 457 with credit or concurrent registration in Chemistry 417. Chemical Physics majors can replace Chemistry 457 with credit or concurrent registration in Physics 311.

Theory and application of instrumental methods of chemical separation and analysis most frequently used in all disciplines of chemistry.

## CHEM 560. General Biochemistry (3)

Prerequisites: Chemistry 232, 232L, and credit or concurrent registration in Chemistry 410A, 432, 432L.

The structure, function, metabolism, and thermodynamic relationships of chemical entities in living systems. Not open to students with credit in Chemistry 365.

## CHEM 562. Intermediary Metabolism (2)

Prerequisite: Chemistry 365 or 560.
Catabolic and biosynthetic pathways of carbohydrate, lipid, amino acid, and nucleotide metabolism; TCA cycle, mitochondrial and chloroplast electron transport chains, ATP generation and their interactions and control.
CHEM 563. Nucleic Acid Function and Protein Synthesis (2)
Prerequisite: Chemistry 365 or 560.
DNA replication, RNA transcription, RNA processing, and protein translation, including chemical mechanisms of synthesis and cellular mechanisms of regulating gene expression; genomics, recombinant DNA, and DNA topology.

CHEM 564. Receptor Biochemistry and Protein Modification (2)
Prerequisite: Chemistry 365 or 560.
Biochemical study of receptors, second messengers, and cellular proteins that participate in extracellular and intracellular communication, with focus on protein structures, post-translational modifications, and biochemical mechanisms that regulate receptors and effector enzymes.
CHEM 567. Biochemistry Laboratory (3)
One lecture and six hours of laboratory.
Prerequisite: Chemistry 560.
Theory and practice of procedures used in study of life at molecular level. Includes purification and characterization of enzymes, isolation of cell components, and use of radioactive tracer techniques.
CHEM 571. Topics in Environmental Chemistry (1-3)
Prerequisites: Chemistry 232, 232L, 251; consent of instructor for all other majors.

Fundamentals of chemistry applied to environmental problems. Chemistry of ecosystems; analysis of natural constituents and pollutants; sampling methods; transport of contaminants; regulations and public policy. Maximum credit three units.

## CHEM 596. Advanced Special Topics in Chemistry (1-3)

Prerequisite: Consent of instructor.
Advanced selected topics in modern chemistry. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

# Chicana and Chicano Studies 

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Faculty
Emeritus: Butler, Grajeda-Higley, Griswold del Castillo, Rodriguez, Villarino
Chair: Ibarra
Professors: Hicks, Iglesias Prieto, Ortiz
Associate Professors: Del Castillo, González-Rivera, Hernández, Ibarra
Assistant Professor: Domínguez

## Offered by the Department

Master of Arts degree in Chicana and Chicano studies.
Major in Chicana and Chicano studies with the B.A. degree
in liberal arts and sciences.
Minor in Chicana and Chicano studies.
Minor in United States-Mexican border studies.
Certificate in United States-Mexico border studies.

## The Major

Chicana and Chicano studies is an interdisciplinary field that takes as its focus of study Chicana/o-Mexicana/o, other Latina/o populations, the US-Mexico border/lands, and society at large. Through an academically rigorous program, the Department of Chicana and Chicano Studies seeks to develop bachelors of art who have a general knowledge of the history, cultures, and social life of Chicana/o-Mexicana/o communities over time in comparative and global contexts. The program provides an in-depth understanding of the social, political, and economic inequalities and challenges faced by Chicana/o-Mexicana/o and other Latina/o communities. Students will learn to critically interrogate assumptions about race/ethnicity, class, gender, citizenship, and sexuality, among other axes of power, as well as understand the influence of border/lands in marking the experiences of Chi-cana/o-Mexicana/o communities and society at large.

The department was created in 1969, and has its origins in the Chicano Movement, which envisioned and fought for a world free of inequality. In this spirit, Chicana and Chicano studies majors will acquire the knowledge and skills to exercise responsible leadership, effectively engage diverse communities, and advocate for social justice and equality.

Chicana and Chicano studies majors are prepared for graduate study and careers in education, government (federal, state, and local), journalism, law, and nonprofit and grassroots organizations.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible. Students are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Impacted Program

The Chicana and Chicano studies major is an impacted program. To be admitted to the Chicana and Chicano studies major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Chicana and Chicano Studies Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 22131) (SIMS Code: 114905)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in Chicana and Chicano studies courses can apply to the degree.

A minor is not required with this major.
Preparation for the Major. Chicana and Chicano Studies 110 and 150. (6 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Students are encouraged to satisfy this language requirement in Spanish. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing Chicana and Chicano Studies 396W or another approved upper division writing course (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 33 upper division units to include 27 units selected from Chicana and Chicano Studies 301, 303, 306, 310 [or Latin American Studies 310], 320, 335 [or English 335], 340A, 340B, 350A, 350B, 355 [or Latin American Studies 355], 375, 376, 380 [or Latin American Studies 380], 396W, 400 [or Latin American Studies 400], 405, 450, 480, 496, 497, 498, 499, 548 [or History 548], 554, 596, Women's Studies 512; and six units selected from Chicana and Chicano Studies 303, 340A, 340B, 376, if not completed above.

## Chicana and Chicano Studies Minor (SIMS Code: 114905)

The minor in Chicana and Chicano studies consists of a minimum of 18 units to include Chicana and Chicano Studies 110 and 150; and 12 units of upper division courses selected from Chicana and Chicano Studies courses.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## United States-Mexican Border Studies Minor

## (SIMS Code: 114902)

The minor in United States-Mexican Border Studies consists of a minimum of 22 units: Spanish 201 and 12 units in upper division courses to include Chicana and Chicano Studies 355 [or Latin American Studies 355], and six units selected from Chicana and Chicano Studies 306, 310 [or Latin American Studies 310], 375, 376, 380 [or Latin American Studies 380], 405.

The following additional nine units must be taken to complete the minor:
International Economics/Business: Three units selected from Chicana and Chicano Studies 301; Economics 360, 365; Finance 329; Marketing 376.
Regional Geography/History and Politics/Society: Six units selected from History 550, 551; Journalism and Media Studies 591; Political Science 555, 568; Social Work 350; Sociology 335, 350, 355.
Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## United States-Mexico Border Studies Certificate

(SIMS Code: 118701)

The United States-Mexico Border Studies Certificate program is an interdisciplinary program integrating border studies courses from academic units throughout the campus. The objective of the program is to train students from diverse academic backgrounds within a multidisciplinary border studies curriculum that provides direct experience in border institutions and policy issues in both the public and private sectors. The program requires 21 units, and a level 3 of Spanish proficiency on a scale of 5, as indicated on the Foreign Service Language Examination. Students must apply for admission to the program before completing nine certificate units and are required to plan their program with an adviser. Contact the Department of Chicana and Chicano Studies.

Required courses: Chicana and Chicano Studies 355 [or Latin American Studies 355] and three units of an internship, either Chicana and Chicano Studies 498 or from the student's major if it is carried out as a border-oriented internship.

Fifteen units selected from the following areas, at least three units from each area. In addition to the courses listed and with the approval of the adviser, students may take border-related courses from other areas, but no more than six units can be from a single department. Courses in the certificate may not be counted toward the minor.
Evolution of Social and Environmental Regions: Chicana and Chicano Studies 375; Geography 496; History 551.
Political and Economic Systems: Chicana and Chicano Studies 306; Economics 496; Political Science 568.
Cultural and Social Institutions: Chicana and Chicano Studies 376; Education 451.
Special Problems/Human Services: Chicana and Chicano Studies 496, Border Research Topics.

## Courses (CCS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

CCS 100. Chicana and Chicano Heritage (3) [GE-ES]
Cultural achievements and thought of Spanish-speaking peoples of North America; development of aesthetic and ethical values. North American intellectual history and influence of philosophical orientations of native and Mestizo peoples. Implications for social change.
CCS 110. Introduction to Chicana and Chicano Studies (3) [ES]
Origins, evolution, and current status of Chicana and Chicano studies. Research, theories, methods, and debates in and impact of the field. Current intellectual trends, scholar activism, and societal developments with implications for the field. Career pathway possibilities.

## CCS 111A. Oral Communication (3) [GE]

Training in oral expression. Chicana and Chicano Studies 111A is equivalent to Communication 103. Not open to students with credit in Africana Studies 140 or Communication 103 or 204.

## CCS 111B. Written Communication (3) [GE]

Prerequisite: Satisfaction of the SDSU Written Communication Assessment requirement. Proof of completion of prerequisite required.

Training in written expression. English grammar and composition; the essay, the term paper. Not open to students with credit in a higher-numbered composition course or Africana Studies 120 or American Indian Studies 120 or Linguistics 100B or Rhetoric and Writing Studies 100 [or English 100] or 105B.
CCS 120A-120B. Chicana and Chicano Role in the American Political System (3-3) [GE-AI-ES]
Semester I: Relationship between Chicana and Chicano communities and the American political system. Semester II: The Chicana and Chicano in relation to city, county, and state institutions in California. This year-long course satisfies the graduation requirement in American Institutions.
CCS 141A-141B. History of the United States (3-3) [GE-AI-ES]
Spanish, Mexican, and Chicano influences on US history. Semester I: Comparative development of the United States and Mexico to 1865. Semester II: Mexican Americans in US history; US and Mexican national histories compared from 1865 to the present. This year-long course satisfies the graduation requirement in American Institutions.

## CCS 150. Critical Issues in Chicana Studies (3) [ES]

Critical themes in Chicana feminist scholarship: power and resistance; work, family, and culture; cultural representations and presentations; social and biological reproduction.
CCS 200. Intermediate Expository Research and Writing (3) [GE] Especially designed for bilingual/bicultural students.
Prerequisites: Satisfaction of the SDSU Written Communication Assessment requirement and Chicana and Chicano Studies 111B or Africana Studies 120 or American Indian Studies 120 or Linguistics 100B or Rhetoric and Writing Studies 100 [or English 100] or 105B. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Intermediate composition. Practice in reading, writing, and critical thinking using interdisciplinary sources. Research skills using primary and secondary sources. Argumentative writing skills. Not open to students with credit in Africana Studies 200, American Indian Studies 225, Linguistics 200, or Rhetoric and Writing Studies 200 [or English 200].
CCS 240. Postcolonial Masculinities (3)
Masculinity in post-colonial contexts. Intersections of masculinity and race. Cultural and historical trends and practices, issues of self-identity, media narratives, sexuality, and social and interpersonal relationships.

## CCS 275. Sports and Race (3) [GE-ES]

Intersection of sports and race as it impacts cultural, personal, and social development. Historical and contemporary controversies. Personal cultural experiences with sport as a racialized cultural institution.
CCS 280. Youth Studies in Racialized Contexts (3) [GE-ES]
Two lectures and two hours of activity.
Youth experiences and adolescent development in a racially diverse world. Ways ethnicity, race, and other sociocultural factors impact experiences of youth and lifelong roles.

## CCS 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
CCS 301. Political Economy of the Chicano People (3) [GE-ES]
Prerequisite recommended: Chicana and Chicano Studies 110.
Political and economic roots of the oppression and exploitation of the Chicano from historical, institutional, and theoretical points of view. Parallels between the experience of the Chicano and other Hispanic groups.
CCS 303. Chicana and Chicano Community Studies (3) [GE-ES]
Prerequisite recommended: Chicana and Chicano Studies 110.
Chicana and Chicano communities from a comparative perspective. Systematic inquiry into methods and issues in community studies. Contemporary social, institutional, and political affairs.
CCS 306. Mexican Immigration (3) [ES]
Immigration from Mexico in the context of US immigration history and policies. Comparative study of political, economic, and cultural factors. Undocumented immigration and current US law.
CCS 310. Mexican and Chicano Music (3) [GE-ES]
(Same course as Latin American Studies 310)
Music of Mexico and the Southwest including folk dances appropriate for children and adults. Emphasis on the corrido, its history and development in Mexico and the United States. Course will be taught bilingually.

## CCS 320. Chicana and Chicano Lifestyles (3) [GE-ES]

Social relations and cultural evolution in Chicana and Chicano communities, female-male relationships, and family. Influence of Spanish-Mexican cultural heritage and US industrial-capitalist society. Comparative cross-cultural social science methodology.
CCS 335. Chicana and Chicano Literature (3) [GE] (Same course as English 335)
Ideas, forms, history of significant Chicana and Chicano prose, poetry, and other literary genres.
CCS 340A. Gender, Sex, and Politics in Colonial Mexico (3) [ES]
Prerequisite recommended: Chicana and Chicano Studies 141A or 350A.

History of Mexican women under Spanish colonial rule. Women's agency and diversity of experiences, as they relate to class, race, religion, and sexuality. Nonheteronormative (LGBTQ) sexualities.
CCS 340B. Chicana Women's History: 1848-Present (3) [ES]
Prerequisites recommended: Chicana and Chicano Studies 111B and upper division standing.

History of Chicanas in the United States from 1848 to present, focusing on impact of Mexican American War, important female historical figures, and issues related to race, class, religion, and sexuality.
CCS 350A-350B. Chicana and Chicano History (3-3) [GE-ES]
Semester I: Review of indigenous origins; Hispanic institutions and northward expansion; the Mexican Republic; attention to women's socioeconomic status and significance. Semester II: US encroachment and the US-Mexican War; Chicana and Chicano contributions; the multilingual and multicultural Southwest.

CCS 355. The United States-Mexico International
Border (3) [GE-ES]
(Same course as Latin American Studies 355)
Prerequisite: Upper division standing.
History, culture, economics, and politics of US/Mexico border region. Theories and policy issues surrounding development of region; local regional problems and major agencies, institutions, organizations addressing these problems.

## CCS 375. US/Mexico Border History (3) [GE-ES]

Prerequisite recommended: Chicana and Chicano Studies 110.
Historical problems and movements in the US-Mexican border region, in particular those impacting Spanish-speaking populations on both sides of the border. Contemporary border issues from a historical perspective.
CCS 376. Chicana and Chicano Culture and Thought (3) [GE-ES]
Intellectual history of Chicanas and Chicanos as a synthesis of different cultural traditions and perspectives. Philosophical concepts from pre-Cortesian times to the present.
CCS 380. US/Mexico Borderlands Folklore (3) [GE-ES]
(Same course as Latin American Studies 380)
Prerequisite recommended: Chicana and Chicano Studies 110.
Border folklore, its complexities and dynamics via myths, rituals, legends, sayings, corridos (ballads), and literature of Chicanos and Mexicanos in the US-Mexican border region.
CCS 396W. Chicana and Chicano Prose (3)
Prerequisite: Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units, completed Writing Placement Assessment with a score of 8 or higher (or earned a grade C (2.0) or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisite required: Test scores or verification of exemption; copy of transcript.

A writing workshop. Mutual criticism. Exploration of new form and content in Mexican American prose. Maximum credit six units.
CCS 400. Mexican Images in Film (3) [GE-ES]
(Same course as Latin American Studies 400)
Prerequisite: Upper division standing.
Comparative study of images presented by Hollywood, Mexican, and Chicano cinemas. Critical analysis and discussion of projected values. Comparison of themes in film and text.
CCS 402. Humanizing and Decolonizing Approaches to Theory and Research Methods (3)
Prerequisite: Upper division standing.
Interdisciplinary qualitative and quantitative research methods and theoretical frameworks through a decolonial lens. New innovations in applied humanities research.

## CCS 405. Performing Transnational Citizenship (3) [ES]

Prerequisite: Upper division standing.
Civic, cultural, postnational, and social constructions of citizenship in a local, global, and transnational context. Citizenship and rights of Mexican undocumented migrant and immigrant groups.

## CCS 450. Chicano and Latino Theatre (3) [GE-ES]

Prerequisite: Upper division standing.
Contemporary Chicano theatre including works by people of Puerto Rican, Cuban American, and other Latin American origins in the United States.

## CCS 480. Chicanas and Chicanos and the Schools (3) [ES]

Prerequisite recommended: Chicana and Chicano Studies 110.
The Chicana and Chicano child's experience in the school system from preschool through high school with emphasis on social, intellectual, and emotional growth and development.
CCS 496. Selected Topics in Chicana and Chicano Studies (1-3)
May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

## CCS 497. Senior Thesis (3)

Prerequisites: Senior standing. Open only to Chicana and Chicano Studies majors and minors, and consent of department.

Faculty-supervised independent study culminating in a research paper or project on history, ethos, and social perspectives of Chicana and Chicano studies and indicative of scholarly interest in continued learning.
CCS 498. Internship in US-Mexico Border (3)
Nine to 12 hours per week plus four class meetings.
Prerequisites: Upper division standing, Chicana and Chicano Studies 355 [or Latin American Studies 355], and consent of instructor.

Internship in public or private sector institution, agency, or organization engaged in US-Mexican binational relations or border-related issues.

## CCS 499. Special Study (1-3)

Prerequisites: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)

## CCS 548. Race and Ethnicity in United States History (3)

(Same course as History 548)
Prerequisite: Upper division or graduate standing.
Race and ethnicity in America from colonial period through twentieth century to include historical construction of identity; colonization, slavery, state formation; labor, immigration, politics of whiteness; applicability of black/white binary of a multiethnic society.

## CCS 554. United States-Mexico Transborder Populations and

## Globalization (3)

Prerequisite: Upper division or graduate standing.
An interdisciplinary analysis of the U.S.-Mexican border population. Demographic dynamics and social change in border communities. International migration and transmigration. Transborder families and transnational families. Gender, class, and racial systems in border communities.
CCS 596. Topics in Chicana and Chicano Studies (1-3)
Prerequisite: Consent of instructor.
Advanced topics in Chicana and Chicano studies. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

## Refer to the Graduate Bulletin.

# Child and Family Development 

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E-MAIL: cfdev@sdsu.edu
WEBSITE: http://sdsu.edu/education/cfd
Faculty
Emeritus: Balkwell, Deutsch, Roberts
Chair: Garrity
Professors: Hokoda, Myers-Bowman, Ritblatt
Associate Professors: Garrity, Longstreth, Schlagel, Shapiro
Assistant Professors: Black, Dickson, Essien-Wood, Lazarevic, Linder, Rieth
Lecturers: Bacon, Booth, Gardner, Kent, Myers, Tung

## Offered by the Department

Master of Science degree in child development.
Concentration in early childhood mental health.
Major in child development with the B.S. degree
in applied arts and sciences.
Minor in child development.
Certificate in early care and education.
Certificate in early childhood transdisciplinary education and mental health (refer to the Graduate Bulletin).
Certificate in family life education.

## The Major

The interdisciplinary major in child development draws from many fields of study, including biology, psychology, and sociology, and prepares students for a variety of professional specialties. Graduates with competencies in this major find positions in preschools, child care centers, schools, hospitals, clinics, residential institutions, counseling centers, mental health centers, social services and public welfare agencies, family service agencies, family planning clinics, community programs, business and industry, and government agencies.

Field experience programs offer students supervised work in community agencies, children's programs, the SDSU Children's Center, San Diego City Schools, and various San Diego agencies. All children's programs are inclusive and a wide range of special needs and at-risk populations are served.

The child development degree also provides a flexible curriculum base for continuation into graduate programs in child development, family studies, or early childhood mental health. Majors may also continue graduate work in related fields such as multiple subject teaching credential; marriage and family therapy; occupational and physical therapy; social work; psychology; law; or sociology.

The child development minor is an important adjunct for students in areas such as anthropology; education; exercise and nutritional sciences; liberal studies; nursing; psychology; recreation; social work; sociology; and speech, language, and hearing sciences.

## Impacted Program

The child development major is an impacted program. To be admitted to the child development major, students must meet the following criteria:
a. Complete with a grade of C (2.0) or better: Child and Family Development 135, 270, 270 L (one unit), 272, 275, 278; Biology 100; Psychology 101; Sociology 101; and Psychology 280, or Sociology 201, or a three unit elementary statistics course. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Complete a minimum of 45 baccalaureate level semester units (a minimum of 60 units are required for all transfer applicants);
c. Have a cumulative GPA of 2.40 or better.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Standards for Admission

Special Instructions

1. Background Clearance. Child and family development premajors and transfer students must successfully pass a background check in order to be placed in educational and community settings. Red flag issues which prevent placement may impede progression and successful completion of degree requirements.
2. Tuberculin Clearance. Evidence of a negative tuberculosis test must be provided periodically for community-based classes. Clearance statements may be secured from SDSU Health Services, private physicians or HMOs, or public health agencies.

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Child Development Major

With the B.S. Degree in Applied Arts and Sciences

## (Major Code: 08231) (SIMS Code: 330909)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A minor is not required with this major.
Preparation for the Major. Child and Family Development 135, 270, 270L (one unit), 272, 275, 278; Biology 100; Psychology 101; Sociology 101; Psychology 280, or Sociology 201, or a three unit elementary statistics course. (27-28 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$. The minimum grade in each class is $C$ (2.0) or better.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 50 upper division units to include Child and Family Development 335, 353A, 353B, 353C, 370, 375A, $375 B, 375 C, 475,537,560,575,578,590,598$, and one of the two specializations listed below.
Child Development Specialist: Child and Family Development 377, 378A (one unit), and 378B (one unit) or 378D (one unit), 380, 477, and 577.
Family Development Specialist: Child and Family Development 378C (one unit), 378D (one unit), 536, and nine units selected with the approval of the program adviser.
Requirements for the Major: Child development majors are required to complete three units or 120 hours (minimum) in one of the following three study areas with the preapproval and written consent of the undergraduate adviser.

1. Study Abroad. Courses taken as part of study abroad may count toward the completion of the child development degree. Students need to work with the undergraduate adviser to make sure their selection of classes will qualify.
2. Research. Selected topics are determined by the Department of Child and Family Development. Contact department for directions to register in research laboratories (Child and Family Development 499). Assignments will be made after an interview with the department chair.
3. Community Based Learning. Students work directly with children and service providers in preselected community outreach programs/agencies to further their career and professional development. Students register in Child and Family Development 597 and work under supervision of faculty as well as service providers.

Reflective Learning Portfolio (Child and Family Development 598). Students are required to prepare a portfolio to reflect, integrate, and synthesize their cumulative learning experience acquired in child and family development courses, study abroad programs, involvement in research projects with faculty, and/or internships. The reflective portfolio will be a capstone culminating experience to provide the opportunity to integrate knowledge and understanding of the child and family development curriculum with their academic and personal growth.

## Child Development Minor

(SIMS Code: 330909)
The minor in child development consists of a minimum of 19 units to include Child and Family Development 270, 270L (one unit), Psychology 101, and 12 upper division units selected from Child and Family Development courses.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Early Care and Education Certificate (SIMS Code: 330911)

No new students are being admitted to this program.
Contact the Department of Child and Family Development.

The certificate program in early care and education is designed to strengthen skills and competencies of students interested in careers in early care and education forming and fostering relation-ships-based interactions with young children ages $0-3$ and their families. The certificate program is designed for individuals working on degrees in child development, health science, psychology, and social work. It also provides a self-improvement opportunity for individuals seeking employment working with infants and toddlers and their families.

There are two categories for admission to the certificate:
Category A: Matriculated SDSU students with upper division major status in child development. A maximum of 19 units of the 37 units required for the certificate may be counted towards the major in child development, if applicable.
Category B: Matriculated SDSU students in non-child development majors and non-matriculated SDSU students. Matriculated students from other majors who do not have the preparation for the major in child development will be required to complete the lower division prerequisites first and then the 37 upper division units required for the certificate. Non-matriculated students from the field who have completed the child development units to meet the requirements for teaching in the early childhood field (minimum 24 units in child development) can enroll through SDSU Global Campus for certificate classes and will not be required to complete the lower division prerequisites.
The certificate requires 37 units to include Child and Family Development 135, 270, 270L, 272, 275, 278, 375A, 377, 378A (one unit), 378D (one unit), 380, 477, 560, 565, 577, 580, 585, 595, 597 (six units).

Courses must be completed with a grade of $C(2.0)$ or better in addition to an internship of eight hours per week for two semesters (240 hours).

Courses in the certificate may not be counted toward the child development minor.

## Family Life Education Certificate <br> (SIMS Code: 662925)

No new students are being admitted to this program.
Contact the Department of Child and Family Development.
The purpose of this certificate program is to prepare students for careers in Family Life Education (FLE). FLE is an educational program designed to strengthen relationships in the home and foster positive individual, couple, and family development. The program is designed for individuals working on degrees in child development, health science, psychology, and social work. It also provides a self-improvement opportunity for people seeking employment, promotion, or upward mobility on the job who are not enrolled in degree programs. The certificate corresponds to the 10 content areas of FLE established by the National Council on Family Relations (NCFR): 1) Families and Individuals in Societal Contexts; 2) Internal Dynamics of Families; 3) Human Growth and Development Across the Life Span; 4) Human Sexuality; 5) Interpersonal Relationships; 6) Family Resource Management; 7) Parent Education and Guidance; 8) Family Law and Public Policy; 9) Professional Ethics and Practice; 10) Family Life Education Methodology.

Awarding of the certificate requires completion of an approved pattern of five to six courses (15-18 units) with a grade of $C$ (2.0) or better in each of the courses in one of the 10 areas of FLE. Each area requires the student to take a core of nine units to include Child and Family Development 270+ or Psychology 230+; Child and Family Development 335; Child and Family Development 375B or 375C; Child and Family Development 378B, or 378C or 378D, and two or three additional courses specific to the selected area. The course offerings in each area prepare students for advanced knowledge in that area. For example, courses for the Human Sexuality area meet the criteria for training and standards of the American Association of Sex Educators and Counselors. Contact the department for a full list of required courses for all 10 areas of FLE. A 45 hour internship specific to the chosen content area is required. Courses in the certificate may not be counted toward the minor.

[^10]
## Courses (CFD)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

CFD 135. Principles of Family Development (3) [GE]
Intimacy, compatibility, conflict, and communication in relationship formation and adjustment.
CFD 170. Child and Adolescent Development from a Cultural Perspective (3) [GE]
(Same course as Teacher Education 170)
Theories of child and adolescent development using a cultural and contextual approach with emphasis on self-reflection and lifelong learning. Liberal studies premajors and majors and students seeking teaching credentials will complete Teacher Education 170; all others will complete Child and Family Development 170. Not open to students with credit in Child and Family Development 270, Psychology 230, or Teacher Education 170.
CFD 270. Human Development Across the Lifespan (3)
Prerequisites: Psychology 101; concurrent registration in Child and Family Development 270L (one unit). Proof of completion of prerequisite required: Copy of transcript.

Development from conception to old age; emphasis on biological, cognitive, and socio-emotional development. Not open to students with credit in Child and Family Development 170 [or Teacher Education 170] or Psychology 230.

CFD 270L. Principles of Observation: Child Development Laboratory (1-3)
Three hours of laboratory for each unit.
Prerequisites: Psychology 101; credit or concurrent registration in Child and Family Development 270. Proof of completion of prerequisite required: Copy of transcript.

Multiple methods of observing and recording individual and group behavior of children. Observations required. May be repeated with consent of instructor. Maximum credit three units.
CFD 272. Child, Family, and Community Engagement (3)
Prerequisites: Child and Family Development 135, 270, 270L (one unit); Sociology 101. Proof of completion of prerequisites required: Copy of transcript.

Individual and family needs and the social institutions and agencies attempting to meet these needs. Social issues, service programs, program analyses, and program effectiveness emphasized.
CFD 275. Learning Environments and Developmentally

## Appropriate Practices (3)

Two lectures and two hours of activity.
Prerequisites: Child and Family Development 270, 270 L (one unit). Proof of completion of prerequisites required: Copy of transcript

Design, implementation, and evaluation of developmentally appropriate practices for children and families.
CFD 278. Nutrition, Health, and Safety for Children (2)
Prerequisites: Child and Family Development 135, 270, and 270L (one unit).

Health, safety and nutrition practices, and policies for young children in the context of the family, culture, and community.

## CFD 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

CFD 335. Interactions in Culturally Diverse Families (3)
Prerequisite: Completion of all lower division preparation for the major courses with a grade of C (2.0) or better. Proof of completion of prerequisites required: Copy of transcript.

Family interaction patterns throughout the life cycle in a multicultural society. Emphasis on theories, research findings, and family practices.
CFD 353A. Parenting the Young Child (1)
Prerequisites: Child and Family Development 135, 270, 270L (one unit).

Parenting from conception to age five. Attachment, temperament, behavior regulation in cultural context. Effects of parenting styles and interactions on child's developmental outcomes.

## CFD 353B. Parenting the School-Age Child (1)

Prerequisites: Child and Family Development 135, 270, 270L (one unit).

Parenting the school-age child (ages 5-12). Developmental tasks, parent-child relationship, parenting styles, parents' role as managers, parent involvement in education. Boundaries and behavioral guidelines to raise an emotionally competent child.
CFD 353C. Parenting the Teen and Young Adult (1)
Prerequisites: Child and Family Development 135, 270, 270L (one unit).

Theories and research on parenting teens and young adults within cultural contexts. Effects of parent-child relationship, parenting styles and discipline on identity formation, separation individuation, and intimacy.
CFD 370. Research, Assessment, and Evaluation of Children and Families (3)
Prerequisite: Completion of all lower division preparation for the major courses with a grade of C (2.0) or better. Proof of completion of prerequisites required: Copy of transcript.

Methods for measuring child, caregiver, and family behavior. Evaluation of reliability and validity. Includes research design, sampling techniques, data collection strategies, and values/ethics.

CFD 375A. Human Development and Learning: Infant/Toddler (2)
Prerequisites: Credit or concurrent registration in one of two required Child and Family Development 378 laboratory courses in area of specialization, selected with consent of adviser. Completion of all lower division preparation for the major courses with a grade of $C$ (2.0) or better. Proof of completion of prerequisites required: Copy of transcript.

Physiological, psychological, cognitive, and socio-emotional development of the human organism in cultural contexts from conception to three years of age.
CFD 375B. Human Development and Learning: Early/Middle Childhood (2)
Prerequisites: Credit or concurrent registration in one of two required Child and Family Development 378 laboratory courses in area of specialization, selected with consent of adviser. Completion of all lower division preparation for the major courses with a grade of $C$ (2.0) or better. Proof of completion of prerequisites required: Copy of transcript.

Physiological, psychological, cognitive, and socio-emotional development of the human organism in cultural contexts from age 3 to age 12. Not open to students with credit in Child and Family Development 371 and 375.

## CFD 375C. Human Development and Learning: Adolescence/

 Adulthood (2)Prerequisites: Credit or concurrent registration in one of two required Child and Family Development 378 laboratory courses in area of specialization, selected with consent of adviser. Completion of all lower division preparation for the major courses with a grade of $C$ (2.0) or better. Proof of completion of prerequisites required: Copy of transcript.

Physiological, psychological, cognitive, and socio-emotional development of the human organism in cultural contexts from age 12 to old age. Not open to students with credit in Child and Family Development 371 and 375.
CFD 377. Leadership and Adult Supervision in Child and Family Development Programs (3)
Prerequisites: Child and Family Development 375A, 375B; and two units selected from Child and Family Development 378A, 378B, or 378D. Proof of completion of prerequisites required: Copy of transcript.

Development of leadership, communication, conflict resolution, and supervision of professionals in child and family development programs.
CFD 378A. Laboratory Experiences: Infants/Toddlers (1-3)
Three hours of laboratory for each unit of credit.
Prerequisites: Credit or concurrent registration in Child and Family Development 375A. Completion of all lower division preparation for the major courses with a grade of $C$ (2.0) or better. Proof of completion of prerequisites required: Copy of transcript.

Directed experiences in mainstream settings for infants and toddlers. Observing, screening, assessing, designing, and implementing developmentally appropriate activities. Maximum credit three units with consent of instructor.
CFD 378B. Laboratory Experiences: Preschool/ Kindergarten (1-3)
Three hours of laboratory for each unit of credit.
Prerequisites: Credit or concurrent registration in Child and Family Development 375B. Completion of all lower division preparation for the major courses with a grade of C (2.0) or better. Proof of completion of prerequisites required: Copy of transcript.

Directed experiences in mainstream settings for children ages 3 to 6 , preschool, and kindergarten children. Observing, screening, assessing, designing and implementing developmentally appropriate activities. Maximum credit three units with consent of instructor.

## CFD 378C. Laboratory Experiences: Age 6 Through

 Adolescence (1-3)Three hours of laboratory for each unit of credit.
Prerequisites: Credit or concurrent registration in Child and Family Development 375B or 375C. Completion of all lower division preparation for the major courses with a grade of C (2.0) or better. Proof of completion of prerequisites required: Copy of transcript.

Directed experiences in mainstream settings for children ages six through adolescence. Observing, screening, assessing, designing and implementing developmentally appropriate activities. Maximum credit three units with consent of instructor.
CFD 378D. Laboratory Experiences with Children and Families (1-3) $\mathrm{Cr} / \mathrm{NC}$
Three hours of laboratory for each unit of credit.
Prerequisites: Credit or concurrent registration in Child and Family Development 375A, 375B, or 375C. Completion of all lower division preparation for the major courses with a grade of $\mathrm{C}(2.0)$ or better. Proof of completion of prerequisites required: Copy of transcript.

Directed experiences in intergenerational programs. Observing, screening, assessing, designing and implementing developmentally appropriate interactions for children and their families/caregivers. Maximum credit three units with consent of instructor.
CFD 380. Early Language and Literacy Development in a Linguistically Diverse Society (3)
Prerequisites: Child and Family Development 375A and 375B; and Child and Family Development 378A or 378B or 378D. Completion of all lower division preparation for the major courses with a grade of $C(2.0)$ or better. Proof of completion of prerequisites required: Copy of transcript.
Language acquisition and early literacy development. Brain development and socio-emotional learning. Applications of developmentally appropriate and culturally responsive practice to enhance language, literacy, and school readiness.

## CFD 390. The Hospitalized Child (3)

Prerequisites: Completion of all lower division preparation for the major courses with a grade of C (2.0) or better. Child and Family Development 353A, 353B, 353C, 375A, 375B, 375C, and two units selected from Child and Family Development 378A, 378B, or 378D. Proof of completion of prerequisites required: Copy of transcript.

Psychosocial needs of hospitalized child. Best practices for working with children and their families, and application of patient care vs. family centered care. Stress reduction, coping theories, and role of certified child life specialist.
CFD 437. Violence in Relationships (3) [GE]
Prerequisites: Psychology 101 and Sociology 101.
Impact of relationship violence on individual development and ecological relationships. Historical and cultural contexts, child abuse and neglect, courtship violence, elder abuse, and violence in communities.

## CFD 475. Promoting Behavior Support and Classroom Organization in Early Childhood Settings (3)

Prerequisites: Child and Family Development 353A, 353B, 353C, 375A, 375B, 375C, and two units selected from Child and Family Development 378A, 378B, 378C, or 378D.

Individual and systems-level approach to supporting young child behavior. Strategies for self-regulation, and three-tiers intervention, in early education settings and at home, to support all children, a targeted group of children who require additional support, and individual children who require intensive support.
CFD 477. Administration of Child Development Programs (3)
Prerequisites: Child and Family Development 375A, 375B; and two units selected from Child and Family Development 378A, 378B, or 378D. Proof of completion of prerequisite required: Copy of transcript.

Programs for young children: design, implementation, and evaluation. Research applications and legal requirements for public and private sectors.

## CFD 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.
CFD 499. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
CFD 536. Divorce and Remarriage (3)
Prerequisites: Child and Family Development 335 and 370. Proof of completion of prerequisites required: Copy of transcript.

Integration of family theories and research findings. Emphasis on adjustment to divorce and remarriage throughout life cycles, across cultures, social classes, and ethnicities.

## CFD 537. Child Abuse and Family Violence (3)

Prerequisites: Child and Family Development 370, 375A, 375B, 375C, and two units from Child and Family Development 378A, 378B, 378C, 378D. Proof of completion of prerequisites required: Copy of transcript.

Multidisciplinary approach to child abuse and family violence including maltreatment, mistreatment, neglect, sexual abuse.
CFD 560. Theories in Socio-Emotional Development (3)
Prerequisites: Child and Family Development 370, 375A, 375B, and two units from Child and Family Development 378A, 378B, 378C, 378D. Proof of completion of prerequisites required: Copy of transcript.

Socio-emotional development from infancy to adulthood. Theory of mind, emotional intelligence, and relationship-based development.

## CFD 565. Best Practices of Care for Infants/Toddlers (3)

Prerequisites: Consent of instructor, Child and Family Development 370, and completion of all lower division preparation for the major courses with a grade of $C$ (2.0) or better. Proof of completion of prerequisites required: Copy of transcript.

Best practices of care for infants and toddlers to include respectful, attentive physical care, its basic principles and the practical components of best practices of care for young children. Design environments of care that ensure safety and optimum growth and development in collaboration with families via meaningful connections between child care and child's home and culture.
CFD 575. Public Policy and Professional Ethics in Child and Family Development (3)
Prerequisites: Child and Family Development 370, 375A, 375B, 375C, two units from Child and Family Development 378A, 378B, 378C, 378D, and Child and Family Development 536 or 537 or 590. Proof of completion of prerequisites required: Copy of transcript.

Ethical guidelines and other standards related to child and family development. Informed advocates for equitable educational practices and policies.
CFD 577. Professionalism and Advanced Administration of Child Development Programs (3)
Prerequisite: Child and Family Development 477. Proof of completion of prerequisite required: Copy of transcript.

Problem analysis and development of successful organizational strategies for child development program delivery. Leadership, effective communication, social and ethical issues from a multicultural perspective.

## CFD 578. Conflict Resolution Across the Life Span (4)

Three lectures and three hours of laboratory.
Prerequisites: Child and Family Development 335, 370, 375A, 375B, 375C, 475, two units from Child and Family Development 378A, 378B, 378C, 378D, and Child and Family Development 537 and 560 with an overall grade of $C$ (2.0) or better. Proof of completion of prerequisites required: Copy of transcript.

Theories of conflict development and resolution across lifespan. Parenting styles, discipline, behavior and class management, and conflict resolution techniques used in relationships. Directed experiences using conflict resolution techniques in various settings.

CFD 580. Observation and Assessment of Young Children's Environments and Relationships (3)
Prerequisite: Senior standing.
Ecobehavioral and developmental techniques and procedures to measure development, relationships, and environments. Administration of measures in class and in field.

## CFD 585. Family Involvement and Engagement with Young

Children: Work with Families at Risk (3)
Prerequisites: Upper division or graduate standing.
Role of parents and caregivers in supporting and enhancing developmental outcomes. Home visitation programs, practices, and techniques. Field experience working with families at risk.

## CFD 590. Children with Special Needs (4)

Three lectures and three hours of laboratory.
Prerequisites: Child and Family Development 353A, 353B, 353C, 370, 375A, 375B, and 375C. Two units selected from Child and Family Development 378A, 378B, 378C, and/or 378D.

Adaptive and maladaptive processes throughout life span with emphasis on etiology, development, and adjustment of emotional, psychological, and physical disorders. Directed experience with special needs individuals and their families with focus on inclusion.

## CFD 595. Early Childhood Mental Health: Theory and

Practice (3)
Prerequisite: Senior standing.
Neurorelational framework to understand brain development and mental health. Emotional and behavioral regulation support at home and in educational settings.

## CFD 596. Advanced Studies in Child and Family

Development (1-6)
Prerequisites: Nine upper division units in child and family development.

Advanced study of selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Maximum credit of nine units of 596. No more than six units of 596 may be applied to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.
CFD 597. Field Experience in Child and Family Development

## Programs (3) Cr/NC

Prerequisites: Completion of five child and family development 500-level courses with a grade of C (2.0) or better in each course. Proof of completion of prerequisites required: Copy of transcript.

Work experience in child and family development. Application of theoretical and evidence-based information with reflective supervision from faculty and field supervisor. Development of professional identity, cultural self-awareness, and career goals. Maximum credit six units.
CFD 598. Reflective Learning Portfolio (1) $\mathrm{Cr} / \mathrm{NC}$
Prerequisite: Senior standing. Limited to child development majors. Major code: 08231.

Capstone course to mentor child development majors to integrate knowledge acquired throughout child and family development program. Create portfolio and reflective essay.

## GRADUATE COURSES

## Refer to the Graduate Bulletin.

## Chinese

In the Department of Linguistics and Asian/Middle Eastern Languages In the College of Arts and Letters

OFFICE: Storm Hall West 214
TELEPHONE: 619-594-5268 / FAX: 619-594-4877
WEBSITE: http://chinese.sdsu.edu
Faculty
Emeritus: Woo
Chair: Samraj
Professors: Wu, Zhang
Offered by the Department of
Linguistics and Asian/Middle Eastern Languages
Minor in Chinese.

## Offered by Asian and Pacific Studies

Major in Asian studies, with emphasis in Chinese.

## Offered by International Business

Major in international business, with emphasis in Chinese.

## Language Requirement for the B.A. Degree in Liberal Arts and Sciences

Students electing the study of Chinese to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Chinese 201 or the equivalent level of achievement. The usual sequence of coursework is Chinese 101, 102, and 201. Refer to section of catalog on "Graduation Requirements" for additional ways to satisfy competency.

High School Equivalents
High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:

1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

## Chinese Minor

(Minor Code: 11099) (SIMS Code: 111201)
The minor in Chinese consists of a minimum of 19 units in Chinese; at least 16 units must be taught in Chinese, of which six units must be in upper division courses. The remaining three units may be selected from additional Chinese language courses or selected from Art 263, Asian Studies 351 [or Philosophy 351], 458 [or Religious Studies 458], History 566, 567, either Linguistics 420 or 501, Religious Studies 345.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and General Education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Courses (CHIN)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

Native speakers of Mandarin Chinese will not receive credit for taking lower division courses except with advance approval from the department.

All lower division courses in Chinese are taught in Chinese.
No credit will be given for lower division courses taken after successfully completing any upper division Chinese course taken in Chinese.

No credit will be given for Chinese 101, 102, 201, 202 taken out of sequence or concurrently.
CHIN 100. Elementary Conversational Chinese (3) [GE]
(Same course as Asian Studies 110)
Introductory conversational course for students with little or no previous background in Chinese. Focuses on daily tasks that one may encounter when first going to a Chinese-speaking community. Develops elementary listening and speaking skills needed for accomplishing these tasks.
CHIN 101. Elementary Chinese I (5) [GE]
Five lectures and one hour of laboratory.
Rudiments of Mandarin pronunciation; listening, speaking, reading, and writing with emphasis on communicative ability; acquisition of the most useful phrases and vocabulary items, and over 300 characters; familiarity with basic sentence structures of Mandarin; information on Chinese culture. See Class Schedule for appropriate section based on your background in Chinese.
CHIN 102. Elementary Chinese II (5) [GE]
Five lectures and one hour of laboratory.
Prerequisite: Chinese 101.
Continuation of Chinese 101, including acquisition of an additional 300 characters. Further development of language competence. See Class Schedule for appropriate section based on your background in Chinese.
CHIN 201. Intermediate Chinese $I$ (5) [GE]
Five lectures and one hour of laboratory.
Prerequisite: Chinese 102.
Development of facility to comprehend and produce spoken Chinese. Acquisition of advanced language structures and an additional 400 characters. Emphasis on connected discourse. See Class Schedule for appropriate section based on your background in Chinese.
CHIN 202. Intermediate Chinese II (5) [GE]
Five lectures and one hour of laboratory.
Prerequisite: Chinese 201.
Continuation of Chinese 201. Reading of contemporary work and writing of short passages in Chinese. Acquisition of an additional 400 characters. See Class Schedule for appropriate section based on your background in Chinese.
CHIN 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
All upper division courses in Chinese are taught in Chinese unless otherwise stated.

No credit will be given for Chinese 301 and 302 taken out of sequence.
CHIN 301. Advanced Chinese I (3) [GE]
Prerequisite: Chinese 202.
Greater facility in oral expression and writing for practical purposes; exposure to various styles of language; newspaper and media Chinese; elements of literary and classical language.

## CHIN 302. Advanced Chinese II (3) [GE]

Prerequisite: Chinese 301.
Continuation of Chinese 301. Writing paragraphs and longer expository texts. Reading modern and classical literature.

## CHIN 353. Language and Social Interaction in China (3) [GE]

(Same course as Asian Studies 353)
Stereotypes and empirical findings of the relationship between language use and social behavior in China. Confucianism and Cultural Revolution; personal relationships and hierarchical structure; characteristics of Chinese language and interaction; politeness in everyday social encounters in China; cultural miscommunication. Taught in English.

## CHIN 431. Advanced Conversational Chinese (3)

Prerequisite: Credit or concurrent registration in Chinese 302.
Conversation practice on practical, social, and cultural topics, with aid of spoken language materials such as plays and videotapes; learning conversational strategies and stylistic features.

## CHIN 433. News Media Chinese (3)

Prerequisite: Credit or concurrent registration in Chinese 302.
Understanding Chinese newspapers and other non-print media materials; special structural characteristics; differences between media types and between speech and writing; reading strategies using schemas and contextual inferences; importance of world knowledge and background information.

## CHIN 434. Business Chinese (3)

Prerequisite: Credit or concurrent registration in Chinese 302.
Developing ability to function in Chinese business environment; familiarity with business correspondence, telecommunication, advertising, business terminology and stylistic features, information on intercultural communication, social and cultural background.

## CHIN 496. Topics in Chinese Studies (1-4)

Topics in Chinese language, literature, culture, and linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit eight units.

## CHIN 499. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## Civil Engineering

IN THE COlLEGE OF ENGINEERING

OFFICE: Engineering 424
TELEPHONE: 619-594-6071
E-MAIL: ccee@sdsu.edu
WEBSITE: http://ccee.sdsu.edu
The undergraduate degree in Civil Engineering is accredited by the Engineering Accreditation Commission (EAC) of ABET, http://www.abet.org.

## Faculty

Emeritus: Banks, Buyuksonmez, Chang, Chou, Gurol, Hayhurst, Johnson, Krishnamoorthy, McGhie, Noorany, Ponce, Sharabi, Westermo
Chair: Supernak
The AGC Paul S. Roel Chair in Construction Engineering and Management: Alves
The William E. Leonhard, Jr. Chair in Civil, Construction, and Environmental Engineering: Mladenov
Professors: Bayasi, Garoma Ararsso, Supernak, Valdes
Associate Professors: Alves, Dowell, Kinoshita, Mitropoulos, Mladenov
Assistant Professors: Akhavian, Dykstra, Ghanipoor Machiani, Jahangiri, Miletic, Tavakol-Davani, Verbyla

## Offered by the Department of Civil, Construction, and Environmental Engineering

Doctor of Philosophy degree in engineering sciences: (bioengineering), (electrical and computer engineering), (mechanical and aerospace engineering), (structural engineering).
Master of Engineering.
Master of Science degree in civil engineering.
Concentration in environmental engineering.
Major in civil engineering with the B.S. degree.
Major in construction engineering with the B.S. degree.
Major in environmental engineering with the B.S. degree.

## The Associated General Contractors (AGC) Paul S. Roel Chair in Construction Engineering and Management

The AGC Paul S. Roel Chair in Construction Engineering and Management is funded with an endowment established by generous gifts from members of the Associated General Contractors in San Diego Chapter. Recognizing the need for expert construction professionals, the local construction community has invested considerable resources in this new degree program. In particular, the endowment is funded by a significant gift from Roel Construction, in honor of Paul S. Roel, the son of the company's founder and the man responsible for moving the family business to San Diego in 1959. The current appointee to the chair, Dr. Thais da Costa Alves, has been teaching and advising students, researching, and collaborating with construction companies toward the dissemination and implementation of lean, especially in the field of production planning and control at construction sites.

## The William E. Leonhard, Jr. Chair in Civil, Construction, and <br> Environmental Engineering

The William E. Leonhard, Jr. Chair in Civil, Construction, and Environmental Engineering is funded with an endowment created by generous gifts from William G. Leonhard, Jr. and his parents, William E. and Wyllis M. Leonhard. After Bill Leonhard graduated from San Diego State in 1964, he entered a career in the Air Force, rising to the rank of colonel. In January 1990, he retired from the Air Force, spent the next several years in private industry, and retired again in 1998.

The current chair, Dr. Natalie Mladenov, promotes excellence in undergraduate education, research in environmental engineering, and conducts scholarly activities on the topic of water quality in environmental engineering.

## Mission of the Department

The mission of the Department of Civil, Construction, and Environmental Engineering is to ensure student success by providing a high-quality education through focused instruction, research, and continuing professional development for the benefit of the engineering profession, the environment, and society.

The objective of the program is to give the student a basic knowledge of civil, construction, and environmental engineering, as well as the interdisciplinary background and skills to meaningfully participate in and contribute technical advances toward this profession. The program integrates technical aspects with studies in the social sciences and humanities to ensure appropriate sensitivity to socially related problems.

Instruction is given both at the undergraduate level, leading to the bachelor's degree, and at the graduate level, leading to the master's or doctoral degrees. The undergraduate program builds upon concepts of mathematics, physics, chemistry and basic engineering with specialized study in civil, construction, and environmental engineering. Engineering design is emphasized, particularly in conjunction with computer utilization and practical engineering problems. Aspects of safety and engineering ethics are woven throughout the program. Breadth and depth of social science and humanities studies is assured by department approved courses. Completion of the under-graduate degree prepares the student for an entry-level professional position in addition to informal or formal graduate studies.

Many students who complete the undergraduate programs of the department choose to continue their formal studies on a full- or part-time basis at San Diego State University or at another institution. (See the Graduate Bulletin for additional information.)

The civil, construction, and environmental engineering programs are enhanced through cooperation with the American Society of Civil Engineers, the American Public Works Association, the Associated General Contractors, the Chi Epsilon Civil Engineering Honor Society, and other national organizations who sponsor student chapters to further aid the student's professional development. The chapters at San Diego State University have won many awards in regional and national competition with other schools throughout the country.

## Program Educational Objectives

Graduates of the civil engineering program will (1) be successful engineers in their respective fields of work; (2) be continually progressing in their chosen careers through formal and informal professional development; and (3) be contributing to their profession for the betterment of society and the environment.

## Transfer Credit

No credit will be given for upper division engineering coursework taken at an institution having an engineering program which has not been accredited by the Engineering Accreditation Commission (EAC) of ABET, unless the student successfully completes the first 12 units of engineering work attempted at this university. At that time, and upon recommendation of the department, unaccredited work will be evaluated for full or partial credit.

## The Major

Civil engineering is the application of engineering principles to the improvement of the human environment. The civil engineering major prepares students to design and supervise the construction of buildings, dams, roads, harbors, airports, tunnels, and
bridges. It also provides training in the planning and construction of the complex systems that supply clean water to cities, remove sewage, control floods, and perform other functions which ensure continued health and safety.

Civil engineers are needed in both the private and public sectors. They are employed in the aerospace industry, usually as structural engineers; design and construction of roads, buildings, bridges, airports, dams and other structures; research and teaching at colleges and universities (with an advanced degree); public utilities and transportation; manufacturing; and offshore drilling, environmental pollution, and energy self-sufficiency. New job opportunities in civil engineering will result from growing demands in housing, industrial buildings, power generating plants, and transportation systems.

## Retention Policy

The engineering program expects all majors will make reasonable academic progress toward the degree. Engineering premajors who have either (1) completed major preparatory courses, earned 60 units, but have less than a 2.7 cumulative GPA or (2) earned 60 units but have not completed major preparatory courses and/or have less than a 2.7 cumulative GPA may be removed from the premajor and placed in undeclared.

## Impacted Program

The civil engineering major is an impacted program. To be admitted to the civil engineering major, students must meet the following criteria:
a. Complete with a grade of $C$ (2.0) or better: Civil Engineering 225; Chemistry 202 (or 200); Mathematics 150, 151; Physics 195, 196. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Have an overall cumulative GPA of 2.7.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Civil Engineering Major

With the B.S. Degree
(Major Code: 09081) (SIMS Code: 442001)
This program requires 135 units to include general education. In addition, the total number of units specified in each elective category represents the minimum requirement.

Preparation for the Major. Civil Engineering 100, 121, 160 (or Statistics 250), 218, 220, 225; Aerospace Engineering 280; Biology 100 or 101; Chemistry 202 (or 200); Construction Engineering 101; Mathematics 150, 151, 252; Physics 195, 195L, 196. (48 units)

Civil Engineering 225; Chemistry 202 (or 200); Mathematics 150, 151; Physics 195, 196 must be completed with a grade of $C$ (2.0) or better. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ).

Engineering Science Elective. Select at least one of the following courses: Electrical Engineering 204; Mechanical Engineering 240, 350.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 48 upper division units to include the following required and elective courses. Required upper division courses in the major: Civil Engineering 301 (or Mechanical Engineering 304), 302, 321, 401, 421, 444, 462, 463, 481, 495; Aerospace Engineering 340; Construction Engineering 330; Environmental Engineering 355.

Professional Electives. 15 units of elective credit. Course choices must consist of at least one course from at least four of the six areas to include ten units of designated design courses.
Water - Civil Engineering 445, 530.
Transportation - Civil Engineering 482, 580.
Environmental - Environmental Engineering 363*, 445, 556, 558.

Structural - Civil Engineering 521*, 523, 525, 528.
Geotechnical - Civil Engineering 465.
Construction - Construction Engineering 401, 479, 480, 520.

## *No design component.

Master Plan. A master plan of elective courses must be approved by the undergraduate adviser as soon as the civil engineering major is declared. Students are required to see their undergraduate adviser prior to registration each semester.

## Courses (CIV E)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

NOTE: Proof of completion of prerequisites (copy of transcript) is required for all courses which list prerequisites.

## CIV E 100. Introduction to Civil Engineering (1)

Introduction to diverse field of civil and environmental engineering to include structural, geotechnical, water resources, transportation, construction engineering and management, and environmental engineering. Legal, ethical, and international dimensions of the profession.
CIV E 121. Computer Graphics for the Built Environment (3)
Two lectures and two hours of activity.
Computer aided design for civil engineering applications (AutoCAD).

## CIV E 160. Statistical Methods for the Built Environment (3)

Prerequisite: Mathematics 141.
Application of statistical methods to civil and environmental engineering problems in construction, hydrology, water quality, air pollution, and other related areas. Students with credit or concurrent registration in the following lower division statistics courses will be awarded a total of four units for the two (or more) courses: Civil Engineering 160; Administration, Rehabilitation and Postsecondary Education 201; Biology 215; Economics 201; Linguistics 270; Political Science 201; Psychology 280; Sociology 201; Statistics 119, 250.

CIV E 218. Surveying for Civil Engineering and Construction (3) Two lectures and three hours of laboratory.
Prerequisites: Mathematics 150 and for civil and construction engineering majors, Civil Engineering 160 or for construction management majors, Statistics 119.

Principles of plane surveying. Measurement of horizontal distance, difference in elevation, and angles. Traverse surveys and computations. Horizontal and vertical curves. Principles of stadia. Topographic surveys. Earthwork.
CIV E 220. Civil and Environmental Engineering Computer
Applications (3)
Prerequisite: Mathematics 150.
Graphical information systems (GIS), specialized civil engineering software, advanced problem solving.

## CIV E 225. Mechanics for Civil Engineers (3)

Prerequisites: Mathematics 150. For civil engineering, construction engineering, and environmental engineering majors: Physics 195. For construction management majors: Physics 180A. Open to majors in civil engineering, construction engineering, environmental engineering, and construction management.

Applied forces and reactions of simple structures, beams, and large structures such as bridges, buildings, and dams. Static equilibrium. Not open to students with credit in Mechanical Engineering 200 [or Aerospace Engineering 200] or Mechanical Engineering 220 [or Aerospace Engineering 220].

## CIV E 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
CIV E 301. Introduction to Solid Mechanics (3)
Prerequisite: Aerospace Engineering 200 [or Mechanical Engineering 200] or for civil, construction, environmental engineering, and construction management majors, Civil Engineering 225.

Mechanics of solid deformable bodies involving analytical methods for determining strength, stiffness, and stability of load-carrying members. Not open to students with credit in Mechanical Engineering 304.

## CIV E 302. Solid Mechanics Laboratory (1)

Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Civil Engineering 301 (or Mechanical Engineering 304).

Laboratory studies in solid mechanics. Experimental stress analysis. Experimental confirmation of theory.

## CIV E 321. Structural Analysis I (3)

Prerequisites: Civil Engineering 301 (or Mechanical Engineering 304) and credit or concurrent registration in Civil Engineering 302. Approved upper division engineering major, minor, or another major approved by the College of Engineering. Proof of completion of prerequisites required: Change of major form or other evidence of acceptable major code.

Analysis of beams, frames, trusses, and three-dimensional frameworks. Influence lines; deflections; introduction to statically indeterminate structures and moment distribution.

## CIV E 401. Civil Engineering and Society (1)

Prerequisite: Senior standing in civil engineering.
Role of civil engineers in society. Historical, political, esthetic, and philosophical perspectives on civil engineering. Contemporary issues involving civil engineering.

## CIV E 421. Reinforced Concrete Design (3)

Prerequisite: Civil Engineering 321.
Properties and characteristics of reinforced concrete; design of structural components. Introduction to plastic theory and limit design.

## CIV E 444. Applied Hydraulics (3)

Two lectures and three hours of laboratory.
Prerequisite: Aerospace Engineering 340.
Review of fluid statics. Forces on submerged surfaces. Close conduit flow. Pumps and turbines. Open-channel flow. Dams and reservoirs. Flood control.

## CIV E 445. Applied Hydrology (3)

Two lectures and three hours of laboratory.
Prerequisite: Civil Engineering 444.
Basic hydrologic principles, hydrologic measurements, small and midsize catchment hydrology, frequency analysis, regional analysis, reservoir, stream channel and catchment routing, hydrologic design.

## CIV E 462. Geotechnical Engineering (3)

Prerequisite: Civil Engineering 301 (or Mechanical Engineering 304) or Aerospace Engineering 340.

Mechanics of soils as they apply to engineering problems, soil classification, compaction, swelling, consolidation, strength and permeability. Applications to geotechnical and environmental engineering problems.

## CIV E 463. Geotechnical Engineering Laboratory (1)

Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Civil Engineering 462.

Laboratory procedures of soil testing for geotechnical and environmental engineering problems.

CIV E 465. Foundation Engineering and Earth Retaining Structures (3)
Prerequisite: Civil Engineering 462.
Soil mechanics theories applied to design of shallow and deep foundations; lateral pressure of soils, design of retaining walls.
CIV E 481. Transportation Engineering (3)
Prerequisites: Civil Engineering 160 and 218.
Physical design of transportation facilities, traffic analysis and control for different modes, planning and demand analysis, introduction to environmental impacts of transportation systems and intelligent transportation systems.

## CIV E 482. Highway Engineering (3)

Two lectures and three hours of laboratory.
Prerequisite: Civil Engineering 481.
Highway design, facility sizing, geometric design, drainage, earthwork, pavement design, traffic control devices, safety and environmental considerations.

## CIV E 495. Capstone Design Project (3)

One lecture and six hours of laboratory.
Prerequisites: For civil engineering majors: Credit or concurrent registration in Civil Engineering 321, 444, 462, 481, and Environmental Engineering 355. At least three of these courses must be completed prior to enrolling in this course. For environmental engineering majors: Construction Engineering 330 and credit or concurrent registration in Environmental Engineering 445, 554, 556, 558. At least three of these courses must be completed prior to enrolling in this course. For construction engineering majors, credit or concurrent registration in Construction Engineering 480 and 590.

Application of engineering principles and design techniques to the design of civil engineering projects.

## CIV E 496. Advanced Civil Engineering Topics (1-3)

Prerequisite: Consent of instructor.
Modern developments in civil engineering. See Class Schedule for specific content. Maximum credit six units for any combination of Civil Engineering 496, 499 and 596.
CIV E 499. Special Study (1-3) Cr/NC
Prerequisite: Consent of instructor.
Individual study in the area of civil engineering. Maximum credit six units for any combination of Civil Engineering 496, 499 and 596.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

CIV E 521. Structural Analysis II (3)
Prerequisite: Civil Engineering 321.
Analysis of statically indeterminate structures by virtual work. Advanced treatment of slope deflection, moment distribution. Arch analysis, secondary stresses in trusses. Advanced treatment of influence lines. Introduction to matrix analysis of structures.

## CIV E 523. Design of Light Framed Structures (3)

Prerequisite: Civil Engineering 321.
Material properties for wood and metal studs. Loads and structural forces for buildings. Design of beams, columns, bearing stud walls. Seismic forces and lateral force resisting systems. Roof, floor, and shear wall design. Composite beams.
CIV E 525. Design of Steel Structures (3)
Prerequisite: Civil Engineering 321.
Mechanical behavior of structural steel. Design of steel beams, girders, columns and members subjected to combined stresses. Design of various types of connections of steel structures; plate girders, continuous beams and rigid frames.

## CIV E 528. Masonry Structures Design (3)

Prerequisite: Civil Engineering 321.
Analysis and design of masonry beams, retaining walls, shear walls, bearing walls, and columns. Use of allowable stress and strength design methods. Design project, including structural system analysis and lateral design of masonry buildings.

CIV E 530. Open Channel Hydraulics (3)
Two lectures and three hours of laboratory.
Prerequisite: Civil Engineering 444.
Principles of open channel flow. Analysis and problems of critical, uniform, gradually-varied, and rapidly-varied flows. Flow over weirs and spillways. Bridge, culvert and multiple openings hydraulics and modeling. Channel transitions. Design and environmental problems. Workshops on river analysis system (HEC-RAS 4.0).
CIV E 531. Pipe Flow and Water Distribution Systems (3)
Prerequisite: Civil Engineering 444.
Principles of pressurized pipe flow. Estimation and management of water demand and water supply systems. Analysis of network distribution elements and network modeling. Design of distribution systems, their operation and maintenance, asset management, and financial appraisal.
CIV E 545. Field Methods in Hydrology (3)
Two lectures and two hours of laboratory.
Prerequisites: Civil Engineering 220 and 445 with a grade of $C$ (2.0) or better. Proof of completion of prerequisites required: Copy of transcript.

Equipment, field methods, and techniques used to study hydrologic systems and water resources, to include local streams and watersheds in California. Tools provided to design and implement field studies and interpret data.

## CIV E 580. Traffic Engineering Design (3)

Prerequisite: Civil Engineering 481.
Sizing and configuration of highway facilities based on capacity analysis. Traffic signal design, impact and mitigation studies, parking, safety design.

## CIV E 596. Advanced Civil Engineering Topics (1-3)

Prerequisite: Consent of instructor.
Modern developments in civil engineering. May be repeated with new content. See Class Schedule for specific content. Maximum credit of six units for any combination of Civil Engineering 496, 499 and 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

For additional courses which are electives in the civil engineering program, refer to "Construction Engineering" and "Environmental Engineering" in this section of the catalog.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

## Classics

In the College of Arts and Letters

OFFICE: Arts and Letters 662
TELEPHONE: 619-594-5186 / FAX: 619-594-1004
WEBSITE: http://classicsandhumanities.sdsu.edu
Faculty
Emeritus: Eisner, Genovese, Hamilton, Warren
Chair: Levitt
Associate Professors: Dumas, Smith
Lecturer: Robbins
Offered by the Department of Classics and Humanities
Major in classics with the B.A. degree in liberal arts and sciences. Emphasis in classical humanities.
Emphasis in classical language.
Emphasis in classical languages with honors.
Minor in classics

## The Major

Classics is the study of the languages, literatures, and civilizations of ancient Greece and Rome. These are the oldest European and American traditions of the humanities and the liberal arts. Classics literally means works of the first class or rank, and their profound truths and disciplined forms have ensured their lasting relevance.

All Classics majors take two or more years of Greek or Latin. They may choose the language emphasis that allows them to study one or both languages, or they may choose the broader emphasis in classical humanities. Classics majors have at their disposal the Burnett Classics Seminar Room with its library and media resources. In addition to small language classes, close academic advising, and the fellowship of a small department with diverse interests, Classics majors culminate their studies with a senior seminar.

Although the prime purpose of the Classics major is to satisfy a quest for the original intellectual and artistic values of Western civilization, graduates enjoy a range of professional choices in addition to academic careers in Classics and various humanities disciplines. Classics majors are well prepared for law school, and with supplementary coursework in business, economics, or information systems, a Classics graduate can be very competitive in the business world. Classics graduates also have an advantage as editors, librarians, journalists, and technical writers. Opportunities are available in public relations, government, and other fields where general knowledge, perspective, and a facility with language serve not only the public good but one's own success.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Impacted Program

The classics major is an impacted program. To be admitted to the classics major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Classics Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 15041)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in classics courses can apply to the degree.

During their last semester, all seniors majoring in classics shall submit to the department a portfolio of their scholarly work that includes a 300-word summary of their study of the classics, the paper submitted for Humanities 490, and seminar presentation.

A minor is not required with this major.

## Emphasis in Classical Humanities <br> (SIMS Code: 111525)

Preparation for the Major. Classics 101G-202G (10 unit sequence) or Classics 101L-202L (10 unit sequence); and six units from any other lower division course offered in classics, or Comparative Literature 270A, History 105, Humanities 140. (16 units)

Students should note that a number of the upper division required and recommended courses listed below have lower division prerequisites, but these prerequisites do not constitute requirements per se for the completion of the major.

Language Requirement. Majors in Emphasis in Classical Humanities require completion of six upper division units in a classical language in addition to lower division prerequisites.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing Humanities 390W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. The department encourages international experience for its majors. A student who has completed the Preparation for the Major may apply to the Intercollegiate Center for Classical Studies in Rome (ICCS) or an equivalent, approved program in Italy or Greece for a semester abroad. Units taken during this semester abroad may apply toward the major if approved in advance by a department adviser.

Major. A minimum of 30 upper division units to include Classics 320, 330, History 502, 503, Humanities 490; a minimum of six units of upper division Greek or Latin; nine units of approved electives in art, comparative literature, history, philosophy, theatre, and religious studies appropriate to the study of the ancient Mediterranean world (additional prerequisites may apply to upper division courses outside the department).

Elective Approval. Elective courses taken to fulfill the major must be approved by the classics undergraduate adviser.

## Emphasis in Classical Language

(SIMS Code: 111526)
Preparation for the Major. Classics 101G-202G (10 unit sequence) or Classics 101L-202L (10 unit sequence); and six units from any other lower division course offered in classics, or Comparative Literature 270A, History 105, Humanities 140. (16 units)

Language Requirement. Majors in Emphasis in Classical Language require completion of six upper division units in a classical language in addition to lower division prerequisites.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing Humanities 390W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. The department encourages international experience for its majors. A student who has completed the Preparation for the Major may apply to the Intercollegiate Center for Classical Studies in Rome (ICCS) or an equivalent, approved program in Italy or Greece for a semester abroad. Units taken during this semester abroad may apply toward the major if approved in advance by a department adviser.

Major. A minimum of 30 upper division units to include Classics 320 and Humanities 490; History 502 or 503; 12-18 units of upper division Greek or Latin; three to nine units of electives in Art 568, History 502, 503, Philosophy 401A (additional prerequisites may apply to upper division courses outside the department).

## Emphasis in Classical Languages with Honors

(SIMS Code: 111527)
Preparation for the Major. Classics 101G-202G (10 unit sequence); and Classics 101L-202L (10 unit sequence). (20 units).

Language Requirement. Majors in Emphasis in Classical Languages with Honors require completion of six upper division units in Greek and six upper division units in Latin in addition to lower division prerequisites in Greek and Latin.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing Humanities 390W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. The department requires international experience for the emphasis in classical languages with honors. A student who has completed the Preparation for the Major may apply to the Intercollegiate Center for Classical Studies in Rome (ICCS) or an equivalent approved program in Greece or Italy for a semester abroad. Units taken during this semester abroad may apply toward the major if approved in advance by a department adviser.

Major. A minimum of 30 upper division units to include Classics 320 and Humanities 490; History 502 or 503; 6-12 units of upper division Greek; 6-12 units of upper division Latin; three to nine units of electives in Art 568, History 502, 503, Philosophy 401A (additional prerequisites may apply to upper division courses outside the department).

## Classics Minor

The classics minor consists of a minimum of 17-19 units selected from one of the following:

Classical Humanities (SIMS Code: 111560). The minor in classical humanities consists of a minimum of 18 units in classics, of which 12 units must be upper division. Of these twelve upper division units, a maximum of six units of approved upper division electives in art, comparative literature, history, philosophy, religious studies, and theatre appropriate to the study of the ancient Mediterranean world may be substituted for classics courses (additional prerequisites may apply to upper division courses outside the department).

Classical Language (SIMS Code: 111550). The minor in classical language consists of a minimum of 17-19 units to include fourteen to sixteen units in Greek or Latin language; a minimum of six upper division units in the language and three units of upper division classics must be completed.

Elective Approval. Elective courses taken to fulfill the minor must be approved by the classics undergraduate adviser and the approval must be filed with the Office of Advising and Evaluations.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Language Requirement for the

## B.A. Degree in Liberal Arts and Sciences

Students electing the study of Greek or Latin to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Classics 303G or 303L or the equivalent level of achievement. The usual sequence of course work is either Classics 101G, 202G, and 303G, OR Classics 101L, 202L, and 303L. Refer to section of catalog on "Graduation Requirements" for additional ways to satisfy competency.

## High School Equivalents

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:

1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

## Courses (CLASS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

Classics includes courses in Greek and Latin as well as non-language courses. Greek course numbers have a G suffix; Latin courses have an L suffix.

No credit will be given for Classics 101G, 202G, 303G, 304G taken out of sequence.

No credit will be given for Classics 101L, 202L, 303L, 304L taken out of sequence.
CLASS 101G. Ancient Greek I (5) [GE]
Beginning classical Greek. Basic grammar, vocabulary.
CLASS 101L. Latin I (5) [GE]
Beginning classical Latin. Basic grammar, vocabulary. Not open to students with credit in Classics 250L.
CLASS 120. English Words from Latin and Greek (3) [GE]
Latin and Greek words and bases and their English derivatives. Etymology, word analysis and construction, language history, and structure.

## CLASS 140. Introduction to Classics (3) [GE]

Survey of Greek and Roman art, literature, drama, sculpture, and institutions. Influence on our culture today. Contemporary relevance of epic heroes, tragic heroines, gods and goddesses. Impact of political thought.

## CLASS 202G. Ancient Greek II (5) [GE]

Prerequisite: Classics 101G.
Continuing classical Greek. Grammar, vocabulary, syntax. Preparation for Classics 303G.
CLASS 202L. Latin II (5) [GE]
Prerequisite: Classics 101L.
Continuing classical Latin. Grammar, vocabulary, syntax. Preparation for Classics 303L. Not open to students with credit in Classics 250 L .

CLASS 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree
C. Experimental Topics in Classics.
G. Experimental Topics in Greek.
L. Experimental Topics in Latin.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
CLASS 303G. Reading Greek Prose (3) [GE]
Prerequisite: Classics 202G.
Reading classical prose authors such as Xenophon or Plato in original Greek. Attention to vocabulary, syntax, style, and histori-cal-cultural context.
CLASS 303L. Reading Latin Prose (3) [GE]
Prerequisite: Classics 202L.
Reading classical prose authors such as Caesar or Cicero in original Latin. Attention to vocabulary, syntax, style, and historical-cultural context.
CLASS 304G. Reading Greek Poetry (3) [GE]
Prerequisite: Classics 303G.
Reading classical poets such as Homer or Euripides in original Greek. Attention to vocabulary, syntax, style, and historical-cultural context.
CLASS 304L. Reading Latin Poetry (3) [GE]
Prerequisite: Classics 303L.
Reading classical poets such as Catullus or Ovid in original Latin. Attention to vocabulary, syntax, style, and historical-cultural context.
CLASS 310. Greek and Roman Myth and Legend (3) [GE]
Prerequisite recommended: Rhetoric and Writing Studies 200.
Great stories from the past. Heroes and heroines. Gods and goddesses. War and peace. Love and death. Adventure, romance, and peril in ancient literature, arts, and religion. Relevance and influence today.
CLASS 320. Epic and the Novel (3) [GE]
Prerequisite recommended: Rhetoric and Writing Studies 200.
Four classic works in the genre of epic and the novel in English translation; Homer's lliad and Odyssey, Vergil's Aeneid, and Apuleius' Golden Ass. Literary criticism in historical-cultural contexts and relevance today.
CLASS 330. Comedy, Tragedy, Actors, and Audiences (3) [GE]
Prerequisite recommended: Rhetoric and Writing Studies 200.
Classical tragedy and comedy in English translation. Playwrights such as Aeschylus, Sophocles, Euripides, Aristophanes, Plautus. Ancient theatre, stagecraft, literary criticism, and popular attitudes.
CLASS 340. Gods, Gladiators, and Amazons (3) [GE]
Prerequisite recommended: Rhetoric and Writing Studies 200.
Literary, artistic, and intellectual achievements of the classic world. Temples, tragedies, and texts. Priests, prostitutes, and proconsuls. Great cultural traditions and influences.

## CLASS 350. Classics and Cinema (3) [GE]

Heroes, heroines, and conflicts of ancient Greece and Rome as represented in major cinematic "sword and sandal" productions. Screenplays compared with Greek and Latin sources in English translation.

CLASS 360. Sex, Gender, and the Erotic in the Ancient World (3) [GE]
Prerequisite recommended: Rhetoric and Writing Studies 200 with a grade of $C$ (2.0) or better.

Women's lives and experiences in ancient Greek and Roman history and literature. Gender/feminist theory and application to readings of ancient texts and material culture. Ancient attitudes toward love and sexual activity. Gender identity, homosexuality, and pederasty.

## CLASS 450L. Seminar: Variable Topics in Latin Literature (3)

Prerequisite: Classics 304L.
Reading significant Latin language texts in history, biography, religion, and other areas. Attention to vocabulary, syntax, style, and historical-cultural context. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.
CLASS 496. Topics in Classical Studies (1-4)
Topics in classical languages, literatures, cultures, and linguistics. May be repeated with new content. See Class Schedule for specific content. Maximum credit nine units. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.
C. Topics in Classics.
G. Topics in Greek.
L. Topics in Latin.

CLASS 499. Special Study (1-3)
Prerequisites: Consent of instructor and department chair.
Directed individual study. Maximum credit six units in any combination of 499C, 499G, 499L.
C. Special Study in Classics.
G. Special Study in Greek.
L. Special Study in Latin.

## UPPER DIVISION COURSE

(Also Acceptable for Advanced Degrees)
CLASS 599. Special Study (1-3)
Prerequisites: Consent of instructor and department chair. For 599C: Classics 304L or 304G. For 599G: Classics 304G. For 599L: Classics 304L.

Directed individual study. Maximum credit nine units in any combination of 599C, 599G, 599L.
C. Special Study in Classics.
G. Special Study in Greek.
L. Special Study in Latin.

## Communication

in the College of Professional Studies and Fine Arts

OFFICE: Communication 237
TELEPHONE: 619-594-8512 / FAX: 619-594-0704
E-MAIL: sdsucommunicationadvising@gmail.com
WEBSITE: http://communication.sdsu.edu
Faculty
Emeritus: Andersen, J., Andersen, P., Dionisopoulos, Geist-Martin, Hellweg, Lustig, Samovar, Sanders, Snavely, Spitzberg
Director: Canary
Professors: Beach, Canary, Lindemann, Winslow
Associate Professors: Chen, Martinez, Record, Savage
Assistant Professors: Dykstra-DeVette, Goehring, Ray
Lecturers: Czech, Fallon, McHan, Nuckels Cuevas, Rapp

## Offered by the School

Master of Arts degree in communication
with a specialization in: communication studies.
Major in communication with the B.A. degree in liberal arts and sciences OR applied arts and sciences.
Major in health communication with the B.S. degree in applied arts and sciences.
Minor in communication.
Certificate in communication.
Certificate in health communication.

## General Information

The School of Communication, an academic unit within the College of Professional Studies and Fine Arts, emphasizes scholarly, creative, and professional aspects of communication studies. The school engages in teaching, research, and development of integrated, interactive, international, and intercultural communication for the twenty-first century. The School of Communication is committed to quality undergraduate and graduate education in the field of communication. We prepare students for civic life, professional careers, and further graduate study. We are committed to cutting edge research and instructional innovation which advances understandings of culture, health, institutions, interaction, politics, relationships, and rhetoric in everyday life. We are dedicated to serving San Diego State University, the College of Professional Studies and Fine Arts, and the diverse communities in the urban region in which we live and work.

Students majoring in communication learn different ways that communication has been conceptualized and investigated, as well as ways members of the communication discipline have used their knowledge and scholarship to engage a variety of social problems. Students will be given opportunities to study how effective communication enhances well-being, and relationships; promotes civic engagement; and allows for effective participation in a global community. Courses focus on organizing principles and patterns of social life through observation, analysis, and criticism of human interactions, communication behavior, mediated systems, and technological innovations. Communication graduates have often found positions in occupations such as sales, human resources, training, education, and consulting, or have pursued advanced academic or professional degrees in fields such as law, management, and marketing.

Students majoring in health communication learn how people individually and collectively understand and accommodate to health and illness and the role of communication in shaping professional health care messages and public acceptance of these messages. Courses include instruction in the development and analysis of health-related messages and media; the goals and strategies of health care promotion; relationships, roles, situations, and social structures in the context of health maintenance and promotion; and applications to disease prevention, health advocacy, and communication concerning treatments. Health communication graduates find positions in both profit and non-profit organizations such as public health agencies, hospitals, educational institutions, health insurance companies, and other corporations.

Both majors are firmly grounded in the liberal arts and sciences and are intended to prepare students to be effective members of society, as well as valued employees in whatever careers they may choose to pursue.

## Impacted Program

The communication and health communication majors are impacted programs. To be admitted to the communication or health communication major, students must meet the following criteria:
a. Complete with a minimum grade point average of 2.75 and a grade of $C(2.0)$ or better: six units selected from Communication 160, 201, 204, 245. These courses cannot be taken for credit/no credit (Cr/NC);
b. Complete the general education oral communication requirement with a grade of $C(2.0)$ or better. This course cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
c. Complete a minimum of 45 baccalaureate level semester units and a maximum of 90 semester units. (A minimum of 60 units are required for all transfer applicants.);
d. Have a cumulative grade point average of 2.75 or better.

To complete the communication or health communication major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Communication Major

With the B.A. Degree in Liberal Arts and Sciences OR
Applied Arts and Sciences

## (Major Code: 15061)

(SIMS Code: Liberal 668132; Applied 668131)
All candidates for a degree in liberal arts and sciences or a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in communication courses can apply to the B.A. degree in Liberal Arts and Sciences.

Selecting the B.A. degree in liberal arts and sciences requires meeting the language requirement. Selecting the B.A. degree in applied arts and sciences requires the mathematics competency requirement.

Lower division preparation for the major courses may be satisfied by comparable courses in community colleges or other institutions with which the university has articulation agreements.

A minor is not required with this major but is strongly recommended.

Preparation for the Major. General Education oral communication requirement and six units selected from Communication 160, 201, 204, 245. (9 units) These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a minimum grade point average of 2.75 and a grade of $C$ (2.0) or better in each course. The General Education oral communication course will not be included in the computation of the required grade point average of 2.75 .
Language Requirement (Liberal Arts and Sciences). Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Mathematics Competency Requirement (Applied Arts and Sciences). Competency in mathematics must be satisfied by three semesters of college mathematics or a statistical sequence such as Statistics 250, 350A, 350B (highly recommended); or Sociology 201*, 406*, 407*.
*Additional prerequisites required

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Rhetoric and Writing Studies 305W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Communication 300 and 350 ; nine "conceptualizing communication" units selected from Communication 321, $371,415,450,492$; three "investigating communication" units selected from Communication 420, 441, 462, 465; 15 "communication elective" units selected from Communication 301, 307, 406, 407, 421-428, 445, 446, 452, 470, $482,485,496,499,508,555$, or other upper division three unit communication courses, with no more than nine units from Communication 421-428 (health communication courses); and Communication 495 in the last or second-to-last semester.

## Health Communication Major

With the B.S. Degree in Applied Arts and Sciences
(Major Code: 06013) (SIMS Code: 661140)
All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

Lower division preparation for the major courses may be satisfied by comparable courses in community colleges or other institutions with which the university has articulation agreements.

A minor is not required with this major but is strongly recommended.

Preparation for the Major. General Education oral communication requirement and six units selected from Communication 160, 201, 204, 245. (9 units) These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a minimum grade point average of 2.75 and a grade of $C(2.0)$ or better in each course. The General Education oral communication course will not be included in the computation of the required grade point average of 2.75 .

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Rhetoric and Writing Studies 305W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 42 upper division units to include Communication 300, 321, 350, 495; six units selected from Communication 420, 441, 462, 465; 18 units selected from Communication 421, 422, 423, 424, 425, 426, 427, 428, 485; (three units may be selected from Communication 371, 415, 445, 492, 499, 555); and six units selected from Gerontology 360, 370, Health and Human Services 350, Nursing 350, Philosophy 330, Public Administration 340, Public Health 353,362 , Social Work 430.

## Communication Minor

## (Minor Code: 06011) (SIMS Code: 661119)

Admission to the communication minor requires completion of at least 45 units with a minimum grade point average of 2.75 overall; completion of the General Education Oral Communication requirement with a grade of $C(2.0)$ or better; and six units selected from Communication 160, 201, 204, 245 with grades of $C(2.0)$ or better. The General Education oral communication course will not be included in the computation of the required grade point average of 2.75 .

The minor in communication consists of a minimum of 21 units to include six units selected from Communication 160, 201, 204, 245; Communication 300, 350; six units selected from Communication 321, 371, 406, 415, 445, 450, 470, 485, 492; and three additional upper division units in communication.

Courses in the minor may not be counted toward the major but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed at San Diego State University.

## Communication Certificate

## (SIMS Code: 668133)

The certificate program in communication emphasizes scholarly, creative, and professional aspects of communication studies. Coursework includes instruction that provides understanding of culture, health, institutions, interaction, politics, relationship, and rhetoric in everyday life. The focus is placed on how effective
communication enhances well-being and relationships; promotes civic engagement; and allows for effective participation in a global community.

To be admitted to the certificate program, students must be enrolled at San Diego State University or through SDSU Global Campus.

The certificate requires 12 units from Communication 201, 245, 300, 371. Coursework must be completed with a GPA of 2.0.

Courses in the certificate may not be counted toward the major or minor in the School of Communication.

Contact the school director for additional information.

## Health Communication Certificate

(SIMS Code: 661141)
The certificate program in health communication focuses on how people understand and communicate about health and illness. Coursework includes instruction in health-related and care-related messages, the goals and strategies of health care promotion, the relationships, roles, situations, and social structures in health maintenance and promotion, and the communication surrounding wellness, illness, and health care in personal and professional relationships.

To be admitted to the certificate program, students must be enrolled at San Diego State University or through SDSU Global Campus.

The certificate requires 12 units to include Communication 321 and nine units selected from Communication 421, 422, 423, 424, $425,426,427,428$. Coursework must be completed with a GPA of 2.0.

Courses in the certificate may not be counted toward the major or minor in the School of Communication.

Contact the school director for additional information.

## Courses (COMM)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

COMM 103. Oral Communication (3) [GE]
One lecture and two hours of recitation.
Training in fundamental processes of oral expression; method of obtaining and organizing material; outlining; principles of attention and delivery; practice in construction and delivery of various forms of speeches. Not open to students with credit in Africana Studies 140 or Chicana and Chicano Studies 111A.

## COMM 160. Argumentation (3)

Argument as a form of discourse; organizing, supporting, presenting and refuting arguments in a variety of formats; evaluating argument, including common fallacies in reasoning.
COMM 201. Communication and Community (3)
Prerequisite: Communication 103.
Communication as an academic and professional discipline, its associations and journals, history and traditions, relationships to other disciplines, research methodologies, and careers for graduates.
COMM 204. Advanced Public Speaking (3)
Prerequisite: Communication 103.
Practice in extemporaneous speaking on subjects of current interest, both national and local, with stress on organization and delivery.

## COMM 245. Interpersonal Communication (3) [GE]

Theory and practice of interpersonal communication. Role of communication in developing, initiating, maintaining, and transitioning through everyday social relationships. Challenges of managing interpersonal communication; contexts, and verbal and nonverbal messages.
COMM 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

COMM 300. Conceptualizing Communication (3)
Prerequisite: Admission to a major, minor, or certificate program in the School of Communication.

Communication theory, concepts, principles, and practices. Communication as art and process on micro and macro levels, integrates understanding of sources, messages, transmission, and feedback in creating meaning and culture.
COMM 301. Intercollegiate Speech and Debate
Competition (1-3) $\mathrm{Cr} / \mathrm{NC}$
Two to six hours of activity.
Prerequisite: Communication 103.
Competitive intercollegiate debate and/or individual speaking events. Apply communication theory to comprehensively analyze relevant contemporary issues. Weekend travel to competitive tournaments required. Travel expectation commensurate with units. May be repeated with maximum credit three units applicable to the communication major.
COMM 307. Communication in Professional Settings (3)
Prerequisites: Admission to a major or minor in the School of Communication.

Communication principles in professional contexts including interviewing and technical and nontechnical oral presentations. Skill in meeting management.
COMM 321. Introduction to Health Communication (3) [GE]
Prerequisite: Completion of the General Education requirement in Communication and Critical Thinking I.1., Oral Communication or I.3., Critical Thinking. Open to majors and nonmajors.

Health communication topics to include patient-provider communication, health communication campaigns, supportive relationships, and public policy. Research methodologies, theories, and best practices in health communication. Required of all health communication majors prior to 400-level coursework.
COMM 350. Investigating Communication (3)
Prerequisite: Admission to a major or minor in the School of Communication.

Study of human communication, from methodological and epistemological perspectives.
COMM 371. Intercultural Communication (3) [GE]
Prerequisite: Communication 103. Open to majors and nonmajors.

Study of communication with emphasis on influence of cultural background, perception, social organization, language and nonverbal messages in the intercultural communication experience.
COMM 405. Performance as Communication (3)
Prerequisites: Communication 300 and 350.
Performance as a tool to investigate aspects of identity. Performance ethnography, performance in everyday life, and personal narrative.
COMM 406. Organizational Communication (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.

The organization as a communication system; role of the organization in persuasive campaigns; communication strategies and problems within the organizational structure.
COMM 407. Communicative Perspectives on Interviewing (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.

Application of communicative theory to interviewing situations. Emphasis on perception, source, message, and receiver variables, defensive communication, feedback. Phrasing of questions, ways to enhance respondent participation, and formulation of behavioral objectives. Classroom simulation, supplemented by out-of-class interviews.
COMM 415. Nonverbal Communication (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.

Theory and research on nonverbal aspects of communication, with emphasis on codes and functions.

## COMM 420. Quantitative Methods in Communication (3)

Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.

Quantitative research in communication. Construction and analysis of surveys and experiments.
COMM 421. Health Communication and Community Based Service Learning (3)
Prerequisite: Communication 321. Admission to a major, minor, or the health communication certificate program in the School of Communication.

How people understand, share ideas about, and adjust to health and illness. Personal, interactional, cultural, and political complexities of health beliefs, practices, and policies in the context of com-munity- based service learning project.

## COMM 422. Politics of Health Communication (3)

Prerequisite: Communication 321. Admission to a major, minor, or the health communication certificate program in the School of Communication.

How communicating about health is culturally and politically charged. Contemporary concerns in health communication to include how ethnicity, gender, disability, social class, and sexual orientation inform our understandings of health, fitness, and illness.
COMM 423. Patient-Provider Communication (3)
Prerequisite: Communication 321. Admission to a major, minor, or the health communication certificate program in the School of Communication.

Primary communication activities organizing medical interviews in clinical settings to include techniques for raising and responding to concerns about life, illness, and disease; implications for quality of care, healing outcomes, and medical education.
COMM 424. Health Communication and Relationships (3)
Prerequisite: Communication 321. Admission to a major, minor, or the health communication certificate program in the School of Communication.

Influences of institutional, social, and personal relationships on health. Influences of health on development of human relationships, interaction between relationships, health practices, and outcomes.

## COMM 425. Theory and Research in Health Communication

 Campaigns (3)Prerequisite: Communication 321. Admission to a major, minor, or the health communication certificate program in the School of Communication.

Theory and research on effective health communication campaigns in various settings to promote healthy lifestyles, nutrition, exercise, health screening, disease and injury prevention behavior.
COMM 426. Communication in Health Risk and Crises (3)
Prerequisite: Communication 321. Admission to a major, minor, or the health communication certificate program in the School of Communication.

Role of communication in preventing, responding to, and coping with community health crises; principles of competent communication in health related risks and crises.
COMM 427. Health Communication and Cultural Communities (3)
Prerequisite: Communication 321. Admission to a major, minor, or the health communication certificate program in the School of Communication.

Diversity of cultural perspectives on communicating health, illness, and prevention. Understanding cultural knowledge patients, families, providers, and communities bring to communicating health.
COMM 428. Communicating Health and Well-Being at Work (3)
Prerequisite: Communication 321. Admission to a major, minor, or the health communication certificate program in the School of Communication.

Research and theory regarding communication topics that restrict well-being at work to include stress, bullying, sexual harassment, and injustice. Concepts and trends that alleviate or eliminate stress to include social support, spirituality, and wellness programs at work.

## COMM 441. Foundations of Critical and Cultural Study (3)

Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.

Central concepts, examples, theories, and experiences of critical studies of communication in culture through cultural, rhetorical, and media literature and cases.
COMM 445. Relational Communication (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.

Theory and application of effective relational communication principles in both intimate and nonintimate contexts. Theoretical and empirical evidence on communication strategies and behaviors in relationship initiation, development, and termination. Relationship of communication behaviors to relational goals.
COMM 446. Communication and Rhetorical Movements (3) Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.

Historical perspectives of role of communication in social change in rhetorical movements and social change.

## COMM 450. Rhetorical Theory (3)

Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.

Development of rhetorical theory as a mechanism for generating and understanding public discourse. Theories from ancient Greece to the present.
COMM 452. Interaction and Gender (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.

Contemporary research and theory on communication and gender. Examination of gender as ongoing interactional achievement. Gender displays and myths across diverse relationships, institutions, media, and society.
COMM 462. Ethnography and Communication (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.

Naturally occurring interactions drawn from a variety of communication settings. Primary methods of gathering data include: participant observation, interviewing, document and artifact analysis, and other forms of communication.

## COMM 465. Conversational Interaction (3)

Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.

Sequential organization of naturally occurring conversational practices. Reliance on recordings and transcriptions for detailed examinations of interactants' methods for achieving social actions and organizing interactional occasions.

## COMM 470. Argumentation Theory (3)

Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.

Approaches to argument and the patterns and problems in argument. Consideration of implications for society. Written and oral reports.

## COMM 482. Communication and Politics (3)

Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.

Contemporary political communication events and processes, with a focus on speeches, debates, and campaigns.

## COMM 485. Communicating Leadership (3)

Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.

Current theory and research in leadership and communication. Understanding yourself, role of leadership, and selection of appropriate communication strategies for leadership.

## COMM 490. Internship (1-3) $\mathrm{Cr} / \mathrm{NC}$

Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.

Students work at approved organizations off-campus under the combined supervision of organization personnel and instructors. Internship hours to be arranged. Maximum credit three units.

## COMM 492. Persuasion (3)

Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.

Key variables and theories in the persuasion process; persuasive sources, messages, receiver variables, propaganda, brainwashing, cognitive, behavioral, and social theories of persuasion.
COMM 495. Communication Capstone: Conceptualizing and Investigating Communication (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication. Communication majors must have completed conceptualizing ( 9 units) and investigating (3 units) requirements. Health communication majors must have completed investigating ( 6 units) and two upper division health communication courses beyond Communication 321 ( 6 units).

Capstone survey, analysis, and comparison of theories, methods, and discipline of communication.

## COMM 496. Experimental Topics (1-4)

Experimental topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.
COMM 499. Special Study (1-3)
Prerequisite: Approved special study contract required prior to enrollment.

Approved individual study, project or research under supervision of faculty member. Maximum credit three units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
NOTE: Communication courses numbered 500 to 599 are not acceptable for the Master of Arts degree in Communication.
COMM 508. Media Literacy (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.

Role played by video texts in shaping culture including information distribution, entertainment, and socio-cultural influence exercised by television. Emphasis on audience/medium relationship and to developing critical skills.
COMM 540. Communicating Science in the Public Interest (3)
Prerequisites: Senior or graduate standing and admission to a communication or other approved major or minor.

Case studies of scientific distortion and success. Importance, misuses, and uses of scientific communication. Competent scientific communication, from manuscript preparation to public presentation. Not applicable to the Master of Arts degree in communication.
COMM 555. Conflict Management Communication (3)
Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.

Approaches to conflict communication in international, societal, group, institutional, and interpersonal contexts.

## COMM 596. Selected Topics (1-4)

Prerequisite: Senior standing or above.
Specialized study in selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

# Comparative International Studies 

## OFFICE: Arts and Letters 536

TELEPHONE: 619-594-1654
E-MAIL: zyusufjonova@sdsu.edu

## Faculty

Faculty assigned to teach international studies courses are drawn from the disciplinary departments and area studies centers in the College of Arts and Letters.

## Program Director and

Undergraduate Adviser: Zamira Y. Abman (History)
Committee: Abdel-Nour (Political Science), Csomay (Linguistics and Asian/Middle Eastern Languages), Donadey (European Studies),
Pérez (Anthropology), Wawrytko (Philosophy)

## Offered by Comparative International Studies

Major in comparative international studies with the
B.A. degree in liberal arts and sciences.

## The Major

Comparative international studies is an interdisciplinary program that offers a broad view and understanding of international and global forces in a wide range of human activities and across the disciplines included in the humanities and social sciences. The major provides students with the opportunity to engage in a comparative study of two world regions, learn a foreign language, experience international contexts through study abroad, and conduct research. Students majoring in comparative international studies are prepared for a rapidly changing, linguistically diverse, and multi-ethnic world. Students choose this major because they can learn about cultures and societies outside the United States and because it prepares them to work in a variety of social, cultural, and economic environments.

The program requires students to take three of the four thematically organized courses that aim to integrate theoretical knowledge about global processes and knowledge about comparative methods including analytical techniques used to study them. The four themes are identified as follows: human and social development, culture and society, populations and borders, institutions and change. Students are also required to take courses on two world regions, identified as a primary and a secondary area of focus, selected from the following areas: Africa, Asia (China) or Asia (General), Europe, North Africa and West Asia (Middle East), and Latin America and the Caribbean. Knowing one or more foreign language is believed to be essential in order to effectively communicate with people of another culture, understand another culture, or conduct research. Therefore, the international studies major requires students to complete a minor in a foreign language.

Graduating majors will gain insights into complex world issues from a comparative perspective and will acquire broad knowledge, skills, and (language) tools necessary to function well in the age of globalization. Those completing the major will be prepared to meet the challenges of the new era of globalization, including careers in local, state, and national government, in national and international non-profit organizations such as social service providers, cultural organizations, or international development agencies, and in areas such as international education, commerce, tourism, and communications. Majors will also be prepared to pursue graduate level education in liberal arts and sciences, in regional studies, or in a particular discipline within the areas in the humanities and social sciences, and with a solid foundation in a foreign language.

## Advising

Students are required to meet with the undergraduate adviser in order to declare the major. All students admitted to the university with a declared major in comparative international studies are urged to meet with the undergraduate adviser either prior to or during their first semester.

## Impacted Program

The comparative international studies major is an impacted program. To be admitted to the comparative international studies major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Comparative International Studies Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 22997) (SIMS Code: 117002)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."
A minor in a foreign language is required with this major. See list of foreign language minors in the General Catalog. Students are encouraged to contact their minor adviser to discuss the benefits of taking a foreign language oral proficiency test administered by the American Council on Teaching Foreign Languages (ACTFL). The program also requires at least one preapproved study abroad experience.
Courses in the major cannot be double-counted.
Preparation for the Major. (15 units)
Choose three units from each of the groups $\mathrm{A}, \mathrm{B}$, and C :
(A) Humanities: Comparative Literature 270A or 270B, History 100 or 101, Humanities 101, Religious Studies 101, Women Studies 102;
(B) Social Sciences: Anthropology 102, Geography 102 or 106, Linguistics 101, Political Science 103, Women's Studies 101;
(C) Statistics: Economics 201, Political Science 201, Sociology 201 or equivalent.
Choose six units from any combination of regions in group D:
(D) Regions: (Asia) Asian Studies 100 or 101; (Europe) European Studies 101; (Latin America and the Caribbean) Latin American Studies 101; (North Africa and West Asia-Middle East) History 100 or 101, Religious Studies 101. (History 100, 101, and Religious Studies 101 can only be included for this group if not taken for group (A) above.)
Recommended for General Education in Foundations of Learning, Life Sciences: Anthropology 101 or Biology 101; Physical Sciences: Environmental Science 100 [or Sustainability 100], Geography 101, or Geological Sciences 100.

Language Requirement. Comparative international studies majors are required to complete a minor in a foreign language. The minor in a foreign language in one of the two world regions identified as a primary or secondary area of focus will fulfill the foreign language requirement for the major. (Contact minor adviser about the benefits of taking an ACTFL foreign language oral proficiency test.)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.
Study Abroad Requirement. All comparative international studies majors are required to participate in an international experience amounting to a minimum of three weeks spent abroad and completing a minimum of three units of study abroad in one of
the two world regions identified as a primary or secondary area of focus. To meet this requirement, majors must complete one or a combination of the following with the approval and written consent of the undergraduate adviser:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Semester Abroad Program;
4. An SDSU Study Travel Program;
5. General Studies 450.

Major. A minimum of 33 upper division units to include Comparative International Studies 400 and nine units from three of the following four thematic areas selected from two or more departments:
(A) Human and Social Development: Geography 353, 573, History 441, Linguistics 551, Political Science 361, Sociology 352, 433, Women's Studies 310, 580;
(B) Culture and Society: Anthropology 303, 350, 353 [or Sustainability 353], 410, 422, 424 [or Religious Studies 424], 439, Geography 312, 554, Linguistics 350, Philosophy 340, 514, 516;
(C) Populations and Borders: Anthropology 402, Chicana and Chicano Studies 355 [or Latin American Studies 355], 554, Geography 354, Latin American Studies 430 [or Political Science 430], Philosophy 332 [or Sustainability 332], Political Science 380, 565, Sociology 350, Women's Studies 581;
(D) Institutions and Change: Philosophy 328, 344, Political Science 375, 485, 577, Sociology 457, Women's Studies 530;
Complete 21 units from two of the six following world regions selecting 12 units from one regional area and nine units from the other regional area:
(A) Africa: Africana Studies 320, 465 [or French 465], 473, Comparative Literature 440, Political Science 364;
(B) Asia (China): Asian Studies 351 [or Philosophy 351], 458 [or Religious Studies 458] or History 420, History 421 [or Asian Studies 421], 567, 566 or Political Science 575, Political Science 365;
(C) Asia (General): Asian Studies 300 or 320, Asian Studies 460 [or Filipino 460], History 570, Korean 321 [or Asian Studies 321], Philosophy 353 or Religious Studies 338 or 341 or 345, Philosophy 565, Political Science 362 or 575, Religious Studies 315 or 339, Women's Studies 331;
(D) Europe: Classics 320 or 330, Comparative Literature 513, European Studies 301, 424, 501, French 424 or Humanities 310, German 320, History 408, 527, Humanities 407, Italian 424 , Philosophy 505 or 506 or 508 , Political Science 356 , Russian 310 or Humanities 330, Women's Studies 340;
(E) Latin America and the Caribbean: Anthropology 442, Chicana and Chicano Studies 400 [or Latin American Studies 400], Comparative Literature 445, Geography 324, History 415 [or Latin American Studies 415], 416, 551, 558, Latin American Studies 307 [or Portuguese 307], Political Science 366 [or Latin American Studies 366], 566;
(F) North Africa and West Asia (Middle East): Arabic 330, History 473, 474, Political Science 363, Religious Studies 310, 320, 328, 330, Women's Studies 560.

## Courses (CINTS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSE

## CINTS 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

CINTS 400. Comparative International Studies Capstone (3)
Prerequisites: Upper division standing and completion of minimum three weeks of study abroad.

Capstone course for comparative international studies major. Completion of research project based on coursework and study abroad experience.

## CINTS 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## CINTS 499. Special Study (1-6)

Prerequisite: Consent of instructor. Individual study. Maximum credit six units.

# Comparative Literature 

In the College of Arts and Letters

OFFICE: Arts and Letters 226
TELEPHONE: 619-594-5307 / FAX: 619-594-4998
E-MAIL: EandCL@sdsu.edu
WEBSITE: http://literature.sdsu.edu
Faculty
Faculty assigned to teach courses in comparative literature are drawn from departments in the College of Arts and Letters.

## Offered by the Department of English and

## Comparative Literature

Major in comparative literature with the B.A. degree in liberal arts and sciences.
Teaching major in preparation for the single subject teaching credential in English language arts/comparative literature.
See Teacher Education.
Minor in comparative literature.

## The Major

Comparative literature is the study of literature from around the world, transcending the restrictions of national and linguistic boundaries. Traditionally, comparative study has been based on literary movements, periods and lines of influence, as well as on genres, themes, myths, and legends. In recent years comparative literature has come to include the comparison of literature with other areas of human experience.

Comparative literature offers students the opportunity to study a broad range of literary subjects from various cultures throughout the world. Courses are offered in European literature from ancient to contemporary times; in the literature of Asia, Africa, and Latin America; in folk literature, legend, fantasy, and science fiction; in literary theory; and in special topics such as travel literature, literature and existentialism, and Japanese literature and film. All reading is done in English translation.

Because the field covers so wide a range, the comparative literature student does not acquire a comprehensive knowledge of any basic list of "great works." Such a list, for all of world literature, would be far too long. Instead, students learn various approaches to literature, along with specialized knowledge of areas which particularly interest them.

Comparative literature is an excellent major for anyone desiring a broadening and enriching liberal arts education. Its application to foreign cultures is particularly useful for careers in foreign service and international trade. Translating, editing and publishing, journalism, broadcasting, and film are other possibilities, as well as advertising and public relations, politics, writing, library work, and criticism. Comparative literature is also, like English, an excellent foundation for careers in the professions, especially law.

The comparative literature major may also be used as preparation for the single subject (high school) teaching credential in English language arts (see department adviser for more information). Graduate study in comparative literature may lead to teaching at more advanced levels.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Impacted Program

The comparative literature major is an impacted program. To be admitted to the comparative literature major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Comparative Literature Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 15031) (SIMS Code: 111701)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in comparative literature and English courses can apply to the degree.

A minor is not required with this major.
Preparation for the Major. Comparative Literature 270A, 270B; English 220. (9 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 8 or above before taking English 508W with a grade of C (2.0) or better, which is required. See "Graduation Requirements" section for a complete listing of requirements.

Major. (33 units)

1. Twenty-four units in 400 or 500 -level comparative literature courses. May include up to six units of literature in a language other than English OR up to six units selected from the following courses:
Africana Studies 365A [or English 365A], 365B [or English 365B], 465 [or French 465].
American Indian Studies 300, 430.
Chicana and Chicano Studies 335 [or English 335], 380 [or
Latin American Studies 380], 450.
Classics 310, 320, 330, 350.
English 450, 550.
Philosophy 315.
Russian 305A.
Theatre 460B.
Women's Studies 352.
2. Six units of 500-level English courses (no double-counting of courses).
3. Three units of English 508W.

Consult with the Comparative Literature and English honors program adviser for honors program variation.

## Comparative Literature Minor

(Major Code: 15031) (SIMS Code: 111701)
The minor in comparative literature consists of a minimum of 15 units. Three units must be selected from Comparative Literature 270 A or 270 B . The remaining 12 units must be in upper division courses selected from Comparative Literature 440, 445, 470, 513, 561, 580, 584, 594, 595, 596.

The comparative literature minor is not available to students majoring in English.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Courses (CLT)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

## C LT 270A-270B. World Literature (3-3) [GE]

Comparative study of selected major works from various continents and cultures, with emphasis on way literature deals with enduring human problems and values. Semester I: prior to 1500; Semester II: since 1500. Comparative Literature 270A is not a prerequisite to 270 B , and either may be taken separately.

## C LT 296. Topics in Comparative Literature (3)

Introduction to subject matter of comparative studies in literature. Focus on a specific movement, theme, figure, genre, etc. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

## UPPER DIVISION COURSES

(Intended for Undergraduates)

## C LT 440. African Literature (3) [GE]

Comparative study of African literature as well as Black literature of North and South America and the Caribbean; intercontinental influences and the theme of Black identity.
C LT 445. Modern Latin American Literature (3) [GE]
Reading selections from major Latin American authors.
C LT 470. Folk Literature (3) [GE]
Studies in the ballad, bardic poetry, oral and popular literature and folklore.

## C LT 499. Special Study (1-3)

Prerequisites: Consent of instructor and approval of department chair.

Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

C LT 513. Nineteenth Century European Literature (3)
Prerequisites: Six units in literature.
European literature of the nineteenth century or of a more limited period within that century. May be repeated with new content. Maximum credit six units.

## C LT 561. Fiction (3)

Prerequisites: Six units in literature.
A comparative approach to themes and forms in fiction (novel and short story). Focus of course to be set by instructor. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

## C LT 580. Concepts in Comparative Studies (3)

Prerequisites: Six units in literature.
Basic concepts in comparative studies in literature (e.g., influence, movement, figure, genre, etc.); their validity, usefulness, and limitations. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

## C LT 584. Topics in Comparative Horror Studies (3)

Prerequisites: Six units in literature and/or creative writing or graduate standing.

Comparative study of horror literature and other media to include film, music, television, and video games. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.
C LT 594. Topics in Literature and the Arts (3)
Prerequisites: Six upper division units in literature or any of the other arts.

Comparative study of literature and other arts such as painting, sculpture, architecture, music, dance, and film. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units applicable to a bachelor's degree. Maximum credit six units applicable to the M.F.A. degree in creative writing.
C LT 595. Literature and Aesthetics (3)
Prerequisites: Six upper division units in literature or any of the other arts.

Theoretical and experiential investigation of relationships between literature and the other arts; literary works in context of an inquiry into aesthetics. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.
C LT 596. Topics in Comparative Literature (3)
An intensive study of a topic to be selected by the instructor. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## Computational Science

in the College of Sciences

OFFICE: Geology/Mathematics/Computer Science 206H
TELEPHONE: 619-594-3430 / FAX: 619-594-2459
WEBSITE: http://www.csrc.sdsu.edu

## Faculty

Program Director: José E. Castillo (Mathematics and Statistics) Associated Faculty: Bailey (Mathematics and Statistics), Baljon (Physics), Blomgren (Mathematics and Statistics), Carretero (Mathematics and Statistics), Cooksy (Chemistry and Biochemistry), Edwards (Biology), Fan (Mathematics and Statistics), Johnson (Physics), Kumar (Electrical and Computer Engineering), Kuznetsova (Physics), Levine (Mathematics and Statistics), Müller (Psychology), Paolini (Biology, Emeritus), Rohwer (Biology), Sandquist (Astronomy), Segall (Biology), Shen (Mathematics and Statistics), Venkataraman (Aerospace Engineering), Weber (Physics), Xie (Computer Science).

## Offered by Computational Science

Doctor of Philosophy degree in computational science.
Master of Science degree in computational science.
Concentration in data science.
Concentration in professional applications.
Certificate in professional computational science, advanced (refer to the Graduate Bulletin).

## Courses (COMP)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)

## COMP 521. Computational Science (3)

Prerequisite: Mathematics 151.
Matrices and linear equations, solving ordinary differential equations (ODEs), vector spaces, closed form solutions, qualitative theory, Eigenvalues, linear maps, linear differential equations, other techniques, nonlinear systems, higher dimensional systems.

## COMP 526. Computational Methods for Scientists (3)

Prerequisites: Mathematics 252 and 254.
Translating mathematical problem descriptions to computer programs. Introduction to Unix system.
COMP 536. Computational Modeling for Scientists (3)
Prerequisite: Mathematics 151.
Models, computational tools, errors, system dynamics, growth, stability, multicompartment models, Euler's, Runge-Kutta methods, system dynamics, infectious disease, enzyme kinetics, environmental cycles, cardiovascular system, metabolism, global warming, empirical models, HIV, population distributions, diffusion, HPC.
COMP 596. Advanced Topics in Computational Science (1-4)
Prerequisite: Consent of instructor.
Selected topics in computational science. may be repeated with the approval of the instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

## Computer Engineering <br> IN THE COlLEGE OF ENGINEERING

OFFICE: Engineering 426
TELEPHONE: 619-594-7013
WEBSITE: http://electrical.sdsu.edu
The undergraduate degree in Computer Engineering is accredited by the Engineering Accreditation Commission (EAC) of ABET, http://www.abet.org.
Faculty
Emeritus: harris, f., Harris, J., Iosupovici, Lee, G., Marino, Panos, Tummala
Chair: Mi
Coordinator for Computer Engineering: Ozturk
Professors: Gupta, Kumar, Ozturk, Sarkar
Associate Professor: Alimohammad
Assistant Professors: Aksanli, Huang, Paolini, Teh, Xie
Offered by the Department of Electrical and Computer Engineering
Doctor of Philosophy degree in engineering sciences: (bioengineering), (electrical and computer engineering), (mechanical and aerospace engineering), (structural engineering).
Master of Engineering.
Master of Science degree in electrical engineering.
Major in computer engineering with the B.S. degree.
Major in electrical engineering with the B.S. degree.
Certificate in rehabilitation technology
(refer to the Graduate Bulletin).

## Research Laboratories

Embedded Systems Laboratory
Multimedia Communication Laboratory
Pervasive Computing and Smart Health Laboratory
VLSI Design and Test Laboratory
Wireless Networks Laboratory

## Transfer Credit

No credit will be given for upper division engineering coursework taken at an institution having an engineering program which has not been accredited by the Engineering Accreditation Commission (EAC) of ABET, unless the student successfully completes the first 12 units of engineering work attempted at this university. At that time, and upon recommendation of the department, credit will be given for the unaccredited work.

## The Major

Computers are machines that store and process information. Desktop computers, portables, workstations, and mainframe computers are the most readily recognized examples of such devices. Equally important, however, are the millions of tiny computers (microprocessors) that are embedded in machines, instruments, and products of all sorts. For example, there are embedded computers in VCRs, cameras, telephones, CD/DVD players, televisions, washing machines, ovens, robots, automobiles, airplanes, medical instruments, toys, and many other devices, both familiar and exotic.

Computer Engineers are involved in the design, development, manufacture, installation, and operation of general purpose and embedded computers of all sorts. They are both concerned with hardware (i.e., the electronic circuits and devices that actually store and process information) and software (i.e., the programs that control the operation of the hardware). The B.S. degree program in Computer Engineering provides a solid foundation in the fundamentals of mathematics, science, computer hardware, computer software, and engineering design that are needed to practice the profession or to pursue a graduate degree in the field.

In addition to fundamentals, the curriculum also includes training in the areas of rapid growth that are important to modern practice of computer engineering. These include: Very Large Scale

Integrated Circuits design (i.e., the design of electronic circuits implemented on silicon chips); Multimedia Systems (i.e., systems that process audio and visual information as well as text and numbers); Embedded Systems; Digital Signal Processing (DSP), which plays a vital role both in processing the continuous signals that are common in embedded system applications and in compressing and processing the large volumes of information that are common in multimedia systems; Computer Networks, which have become vital for connecting multiple computers in distributed control applications, and connecting users of general purpose computers who wish to share information and computing resources (e.g., Local Area Networks, the Internet); Graphical User Interfaces (GUIs), which are rapidly replacing text-based interfaces in nearly all applications; and Object Oriented Programming (OOP), a technique for designing more reliable and maintainable software.

The computer engineering curriculum provides a balance between theory and practice that prepares the graduate both for immediate employment and for continued study. The process of engineering design is emphasized throughout the curriculum by including open-ended problems with realistic design constraints. The design experience culminates in a capstone design course required of all students. Creativity, consideration of economic and social factors, and the application of systematic design procedures are required in major design projects during the senior year.

## Retention Policy

The engineering program expects all majors will make reasonable academic progress toward the degree. Engineering premajors who have either (1) completed major preparatory courses, earned 60 units, but have less than a 2.7 cumulative GPA or (2) earned 60 units but have not completed major preparatory courses and/or have less than a 2.7 cumulative GPA may be removed from the premajor and placed in undeclared.

## Program Educational Objectives

The overall objective of the undergraduate program in computer engineering is to produce the best skilled, hands on practicing computer engineer. More specifically the objectives are:
A. To provide students with the technical knowledge and skills that will enable them to have a successful career in the computer engineering profession;
B. To provide students with a general education that will enable them to appreciate the social, ethical, economic, and environmental dimensions of problems they may face;
C. To develop in students the communication skills and social skills that are necessary to work effectively with others;
D. To develop the ability of students to solve problems by learning what is already known, and then applying logic and creativity to find a solution;
E. To provide students with the intellectual skills necessary to continue learning and to stay current with the profession as it changes.

## Impacted Program

The computer engineering major is an impacted program. To be admitted to the computer engineering major, students must meet the following criteria:
a. Complete with a grade of $C(2.0)$ or better: Computer Engineering 160; Electrical Engineering 210; Mathematics 150, 151; Physics 195, 196. These courses cannot be taken for credit/no credit (Cr/NC);
b. Have an overall cumulative GPA of 2.7.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Computer Engineering Major

With the B.S. Degree
(Major Code: 09094) (SIMS Code: 445001)
This program requires 132 units to include general education.
Preparation for the Major. Computer Engineering 160, 260, 270, 271; Aerospace Engineering 280; Biology 100 or 101; Electrical Engineering 210; Mathematics 150, 151, 245, 254; Physics 195, 196, 196L. (42 units)

Computer Engineering 160; Electrical Engineering 210; Mathematics 150, 151; Physics 195, 196 must be completed with a grade of $C$ (2.0) or better. Computer Engineering 260, 270, 271; Aerospace Engineering 280; Mathematics 245, 254 must be completed with a grade C - (1.7) or better. These courses cannot be taken for credit/no credit (Cr/NC).

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 51 upper division units to include Computer Engineering 361, 375, 470, 470L, 475, 490, 560; Electrical Engineering 300, 310, 330, 330L, 410; one approved elective course in mathematics (3 units); three approved elective courses selected from computer engineering, electrical engineering, or other approved elective ( 9 units); two approved technical elective courses in computer engineering, computer science, or electrical engineering ( 6 units). After enrollment in Computer Engineering at SDSU, the Computer Engineering major must take all upper division computer science and engineering courses at SDSU unless prior approval is obtained from the department.

Master Plan. The master plan provides an advising record for computer engineering majors and should be initiated by the student with their faculty adviser during the first semester of the junior year. All students must have a master plan on file in the department prior to enrollment in Electrical Engineering 410. Changes to the master plan are permitted with the approval of the faculty adviser and the department chair.

## Courses (COMPE)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

NOTE: Prerequisites will be enforced in all undergraduate computer engineering and electrical engineering courses numbered 100 through 599. A copy of an official transcript will be accepted as proof. For corequisites, an enrollment confirmation form will be accepted.

## LOWER DIVISION COURSES

COMPE 160. Introduction to Computer Programming (3)
Two lectures and three hours of laboratory.
Prerequisite: Mathematics 150 with a grade of $C(2.0)$ or better.
Computer organization and operation. Binary representation of information. Fundamentals of computer programming using a C family language: data types, selection and iteration structures, functions, arrays, pointers, scope and duration of variables. Systematic design and development of computer programs.

## COMPE 260. Data Structures and Object-Oriented

## Programming (3)

Prerequisites: Computer Engineering 160 with a grade of $C$ (2.0) or better. Grade of C- (1.7) or better in Mathematics 245.

Data structures using object-oriented programming. Disciplined approach to design, coding, and testing using OOP, teach use and implementation of data abstractions using data structures. Arrays, linked lists, stacks, queues, trees. Sorting, searching, recursive algorithms.

## COMPE 270. Digital Systems (3)

Prerequisite: Mathematics 151 with a grade of $C$ (2.0) or better.
Modelling, analysis and design of digital systems, primarily at the Logic Design level. Combinational and sequential networks.
COMPE 271. Computer Organization (3)
Prerequisites: Computer Engineering 160 with a grade of C (2.0) or better. Grade of C- (1.7) or better in Computer Engineering 270.

Organization and operation of computer hardware and software. Operating system shell and services. Program design and development. Input-output programming. Multi-module and mixed-language programming. Assembler and $C$ language.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

## COMPE 361. Windows Programming (3)

Prerequisites: Computer Engineering 260 and 271 with a grade of C- (1.7) or better in each course.

Object Oriented Programming (OOP) using C\# and .NET Framework. Graphical User Interface (GUI) and event-driven programming. Visual Studio Integrated Development Environment (IDE). Graphics programming.
COMPE 375. Embedded Systems Programming (3)
Two lectures and three hours of laboratory.
Prerequisite: Computer Engineering 271 with a grade of C- (1.7) or better.

Embedded system architecture; IO programming using parallel ports, serial ports, timers, and D/A and A/D converters; interrupts and real-time programming; program development and debugging tools; C language and assembler.

## COMPE 470. Digital Circuits (3)

Prerequisite: Computer Engineering 270 with a grade of C- (1.7) or better.

Design of digital electronic systems using commercially available high-speed digital devices and circuits.

COMPE 470L. Digital Logic Laboratory (1)
Three hours of laboratory.
Prerequisites: Computer Engineering 470 and Electrical Engineering 330L.
Hands-on experience in characterization and application of standard digital integrated circuit devices.

## COMPE 475. Microprocessors (3)

Prerequisites: Computer Engineering 375 with a grade of C- (1.7) or better. Computer Engineering 470.

Bus design, memory design, interrupt structure, and input/output for microprocessor-based systems.

## COMPE 490. Senior Design Project (4)

Two lectures and six hours of laboratory.
Prerequisites: Computer Engineering 375 with a grade of C- (1.7) or better. Electrical Engineering 330L and credit or concurrent registration in Computer Engineering 470L.

Supervised capstone design projects to provide an integrative design experience for seniors to include ethics, professionalism, cost-effectiveness, and project management.
COMPE 496. Advanced Computer Engineering Topics (1-3)
Prerequisite: Consent of instructor.
Modern developments in computer engineering. See Class Schedule for specific content. Maximum credit nine units for any combination of Computer Engineering 496 and 596 applicable to a bachelor's degree.

## COMPE 499. Special Study (1-3)

Prerequisites: Approval of project adviser and department chair. Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

COMPE 560. Computer and Data Networks (3)
Prerequisites: Computer Engineering 271 and Electrical Engineering 410 with a grade of $\mathrm{C}-(1.7)$ or better in each course.
Wide area and local area networks, multi-layered protocols, telephone systems, modems, and network applications.
COMPE 561. Windows Database and Web Programming (3) Prerequisite: Computer Engineering 361 with a grade of C- (1.7) or better.

Programming applications involving file systems, relational databases, Structured Query Language (SQL), ADO.NET, client-server architecture, multithreading sockets, web servers, web browsers, web services, ASP.NET, Hypertext Markup Language (HTML), and Extensible Markup Language (XML).
COMPE 565. Multimedia Communication Systems (3)
Prerequisite: Credit or concurrent registration in Computer Engineering 560 .
Design and implementation of multimedia communication systems. Image compression, JPEG, VQ, cell-B standards. Video and audio compression standards, MPEG, MPEG-2, H.26X, G.72X. Data storage systems and multimedia requirements. Networking requirements and networks as multimedia carriers. Transport and network protocols for carrying multimedia over data networks. Multimedia system design, scheduling, congestion control, traffic shaping, buffer management.

## COMPE 570. VLSI System Design (3)

Prerequisite: Computer Engineering 470.
VLSI systems at the architectural level for digital signal processing applications: feedforward and feedback systems, fixed-point and floating-point representations, folding, iteration bound, parallel architectures, pipelining, retiming, unfolding, wave and asynchronous pipelining. (Formerly numbered Electrical Engineering 672.)

## COMPE 571. Embedded Operating Systems (3)

Prerequisites: Computer Engineering 260 with a grade of C- (1.7) or better. Computer Engineering 475.
Real-time kernel, basic kernel services, threading and synchronization, preemptive multithreading, mutexes, spin locks, critical sections, priority scheduling, interrupts, RTOS implementation, memory management, task management, intertask communications.

COMPE 572. VLSI Circuit Design (3)
Prerequisites: Computer Engineering 271 with a grade of C- (1.7) or better. Electrical Engineering 330.

Design of digital integrated circuits based on CMOS technology; characterization of field effect transistors, transistor level design and simulation of logic gates and subsystems; chip layout, design rules, introduction to processing; ALU architecture.

## COMPE 596. Advanced Computer Engineering Topics (1-3)

Prerequisite: Consent of instructor.
Modern developments in computer engineering. May be repeated with new content. See Class Schedule for specific content. Maximum credit of nine units for any combination of Computer Engineering 496 and 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

# Computer Science 

OFFICE: Geology/Mathematics/Computer Science 413
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WEBSITE: http://www.cs.sdsu.edu

## Faculty

Emeritus: Anantha, Baase-Mayers, Beck, Carroll, Donald, Lane, Marovac, Riggins, Root, Stewart, Tarokh, Vinge, Vuskovic
Chair: Ren
Professors: Ren, Roch, Xie
Associate Professors: Eckberg, Liu, Wang, Whitney
Assistant Professors: Song, Vu, Xu
Lecturers: Bajic, Kraft

## Offered by the Department

Master of Science degree in computer science.
Major in computer science with the B.S. degree in applied arts and sciences.
Minor in computer science.
Certificate in geographic information science.
Certificate in web and mobile applications development (refer to the Graduate Bulletin).

## The Major

Computer Science is the study of computers and their applications. It is concerned with methods for storing and retrieving information, with the design and use of languages for writing computer programs, with the hardware systems that interpret such languages, and with the theoretical principles that form the foundations of computing. Computer Science includes a wide variety of specialties and application areas such as artificial intelligence, robotics, graphics, systems programming, simulation, and computer networks.

The Bachelor of Science in Computer Science is designed to provide students with a fundamental understanding of modern computing methodology and programming practices along with a complementary knowledge of hardware. The first two years provide the basic preparation in programming, data structures and architecture. The final two years are devoted to more advanced fundamentals and specialized electives.

Computers are used to store and manage information, to analyze scientific data, and in a wide variety of other applications. Computing technology is found in an almost limitless number of settings, ranging from automobiles to household appliances to toys. Because of this, a wide range of jobs are open to people trained in Computer Science. Employment opportunities are expected to remain very strong.

## Impacted Program

The computer science major is an impacted program. To be admitted to the computer science major, students must meet the following criteria:
a. Complete preparation for the major. Computer Science 107, 108, 237; Mathematics 150, 151, 245, 254; and Statistics 250 must be completed with a minimum grade of $C$ (2.0) or better and cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Computer Science Major

With the B.S. Degree in Applied Arts and Sciences

## (Major Code: 07011) (SIMS Code: 773801)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A minor is not required for this major.
Preparation for the Major. Computer Science 107, 108, 237; Mathematics 150, 151, 245, 254; Statistics 250. These courses must be completed with a minimum grade of $C(2.0)$ or better and cannot be taken for credit/no credit (Cr/NC). (26 units)
Additional Lower Division Coursework Required. Twelve units of science courses selected with approval of adviser. Courses must include one of the following two-semester sequences with laboratory: Biology 203, 203L, 204, 204L; or Chemistry 200, 201; or Physics 195, 195L, 196, 196L. The remainder of the 12 units must be science courses that enhance the student's ability to apply the scientific method and must be from a department different from the main year-long science sequence.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 37 upper division units to include Computer Science 310, 320, 370, 440, 490, 530, 560, 570; at least one course selected from Mathematics 340, 579, Statistics 350A, 550, or 551A; and 12 units of computer science electives selected with the approval of a computer science major adviser. At least nine units of electives must be in computer science.
Master Plan. Students should follow the Master Plan Advising Guide to ensure completion of major requirements. Download it at http://www.cs.sdsu.edu/degree-requirements.

## Computer Science Minor

## (SIMS Code: 773801)

The minor in computer science consists of a minimum of 18-23 units in computer science and mathematics to include Computer Science 107, 108; and at least 12 upper division units, or at least nine upper division units if the student completes a full calculus sequence, i.e., Mathematics 150 and 151. The courses selected are subject to the approval of the minor adviser. A list of approved electives is listed at http://www.cs.sdsu.edu/cs-minor-requirements.
Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Geographic Information Science Certificate*

## (SIMS Code: 112949)

The purpose of the program is to prepare students to acquire, analyze, manage, visualize, and develop applications with geospatial data in public and private organizations. Students must apply for admission to the program before the completion of 12 certificate units and must complete the required units with a 2.5 grade point average.

The certificate requires 27 units distributed between the departments of Computer Science and Geography as follows: 12-15 units selected from Computer Science 107, 108, 310, 320, $503,514,520,537$, and 12-15 units selected from Geography 104, 381, 484, 581-592. Courses with relevant content (e.g. Computer Science 596 or Geography 596) may be substituted for the computer science and geography courses with the approval of the certificate adviser. Courses in the certificate may be counted toward the major in computer science if applicable.

## Courses (CS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

CS 100. Computational Thinking (3) [GE]
Prerequisite: Satisfaction of the SDSU Mathematics/Quantitative Reasoning Assessment requirement.

Capabilities and applications of computers. Algorithmic prob-lem-solving methods and computer programming. Using computers to examine questions from other fields of study. Practical and theoretical limits to computation. Machine intelligence and heuristic problem solving. Social and legal impact of computers.
CS 107. Introduction to Computer Programming (3)
Prerequisite: Satisfaction of the SDSU Mathematics/Quantitative Reasoning Assessment requirement.

Programming methodology and problem solving. Basic concepts of computer systems, algorithm design and development, data types, program structures. Extensive programming in Java.

## CS 108. Intermediate Computer Programming (3)

Prerequisite: Computer Science 107.
Further training in program design and development. Object-oriented programming to include inheritance, polymorphism, and generic code. Extensive programming in Java. Introduction to data structures.
CS 200. Introduction to Data Science and Python (4)
Three lectures and two hours of activity.
Basic data analysis with Python to include confidence intervals, regression, and sampling. Data structures, displaying data, and programming constructs.

## CS 237. Machine Organization and Assembly Language (3)

Prerequisite: Computer Science 108.
General concepts of machine and assembly language, data representation, looping and addressing techniques, arrays, subroutines, macros. Extensive assembly language programming.

## CS 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## CS 299. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Intended for Undergraduates)

## CS 301. Computers and Society (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning.

Impact of computers and computing technology on society: applications, benefits, and risks. Topics include privacy, copyright, computer crime, constitutional issues, risks of computer failures, evaluating reliability of computer models, computers in the workplace, trade and communications in the global village. Not open to computer science majors or to students with credit in Computer Science 440.

## CS 310. Data Structures (3)

Prerequisite: Computer Science 108.
Representations and operations on basic data structures. Arrays, linked lists, stacks, queues, and recursion; binary search trees and balanced trees; hash tables, dynamic storage management; introduction to graphs. An object oriented programming language will be used.

CS 320. Programming Languages (3)
Prerequisite: Computer Science 108.
Principles of high-level programming languages, including formal techniques for syntax specification and implementation issues. Languages studied should include at least C++, FORTRAN, and LISP.
CS 370. Computer Architecture (3)
Prerequisite: Computer Science 237.
Logic gates, combinational circuits, sequential circuits, memory and bus system, control unit, CPU, exception processing, traps and interrupts, input-output and communication, reduced instruction set computers, use of simulators for analysis and design of computer circuits, and traps/interrupts.
CS 440. Social, Legal, and Ethical Issues in Computing (3) Prerequisite: Computer Science 108.
Impact of computers, applications, and benefits, copyright, privacy, computer crime, constitutional issues, risks of computer failures, evaluating reliability of computer models, trade and communications in the global village, computers in the workplace, responsibilities of the computer professional. Not open to students with credit in Computer Science 301.
CS 470. UNIX System Administration (3)
Prerequisite: Computer Science 370.
Installing the UNIX operating system on a UNIX workstation, adding user accounts, backing up and restoring user files, installing windows, adding network capabilities, adding printers and other peripherals.

## CS 490. Senior Seminar (1)

Prerequisite: Fifteen units of upper division computer science courses.

Preparation and delivery of oral presentations on advanced topics in computer science. General principles of organization and style appropriate for presenting such material.
CS 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.
CS 497. Undergraduate Research Seminar (3) Six hours of laboratory and one hour with adviser.
Prerequisites: Computer Science 560 or 570 , minimum grade point average of 3.3, and consent of instructor.

Designing and carrying out independent research in one of the areas of computer science. Literature search, technical report writing, and oral presentation of results.
CS 498. Undergraduate Honors Thesis (3)
Prerequisites: Computer Science 497 and consent of instructor.
Directed research in computer science and completion of honors thesis. Thesis to be presented at the annual SDSU Research Symposium and/or defended before a committee of faculty. Maximum credit six units.
CS 499. Special Study (1-3)
Prerequisite: Consent of instructor. Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

## CS 503. Scientific Database Techniques (3)

Prerequisites: Computer Science 310 and Mathematics 245.
Fundamental data models for handling scientific data, including flat file, indexed compressed files, relational databases, and object oriented databases, and their associated query technologies; e.g. file formats, input/output libraries, string searching, structured query language, object-oriented structured query language, hypertext markup language/common gateway interface, and other specialized interfaces. Designed for computational science students. Computer science majors must obtain adviser approval. See Computer Science 514.
CS 514. Database Theory and Implementation (3)
Prerequisites: Computer Science 310 and Mathematics 245.
Database systems architecture. Storage structures and access techniques. Relational model, relational algebra and calculus, normalization of relations, hierarchical and network models. Current database systems.
CS 520. Advanced Programming Languages (3)
Prerequisites: Computer Science 237, 310, and 320.
Object oriented programming, concurrent programming, logic programming. Implementation issues.
CS 530. Systems Programming (3)
Prerequisites: Computer Science 237 and 310.
Design and implementation of system software. Relationship between software design and machine architecture. Topics from assemblers, loaders and linkers, macro processors, compilers, debuggers, editors. Introduction to software engineering and review of programming fundamentals and object oriented concepts. Large project in object oriented programming is required. Not acceptable for the M.S. degree in computer science.

## CS 532. Software Engineering (3)

Prerequisites: Computer Science 320 and 530.
Theory and methodology of programming complex computer software. Analysis, design, and implementation of programs. Team projects required.

## CS 537. Programming for GIS (3)

Prerequisite: Computer Science 310 or Geography 484.
Customization of Geographic Information Science application development platforms with emphasis on object oriented programming and component architecture. Prominent examples are Map Objects with Visual Basic, Map Objects with Java. Considerable programming effort required, especially in Graphical User Interface development.

## CS 540. Software Internationalization (3)

Prerequisite: Computer Science 310.
Principles, techniques, and resources for design and implementation of software localizable to multiple languages and/or cultures, including detailed examination of internationalization features provided by one or more widely used modern programming languages.
CS 545. Introduction to Web Application Development (3) (Offered only through SDSU Global Campus)
Prerequisite: Computer Science 310.
World Wide Web application development. XHTML, CSS, Javascript, client-side and server-side scripting, PHP and CGI programming with Perl. Application integration with SQL database systems.

## CS 546. Human Computer Interfaces (3)

(Offered only through SDSU Global Campus)
Prerequisites: Computer Science 310 and 320.
Common interface idioms and support available for loose integration into aesthetically appealing and practical, efficient interaction between humans and machine. Editors, browsers, games, networking sites, posting boards, etc. Principles that are ubiquitous among tools for HCl development.

## CS 547. Programming and Scripting Languages for Web

 Applications (3)(Offered only through SDSU Global Campus)
Prerequisites: Computer Science 310 and 320.
Principles and practice of dynamic and scripting and functional languages used in web applications. Basic language concepts, data structures in dynamic languages, code structure, code quality, testing, string manipulation, dynamic code generation.

## CS 550. Artificial Intelligence (3)

Prerequisites: Computer Science 310 and either Mathematics 245 or 523.

Heuristic approaches to problem solving. Systematic methods of search of the problem state space. Theorem proving by machine. Resolution principle and its applications.
CS 556. Robotics: Mathematics, Programming, and Control (3)
Prerequisites: Computer Science 320, Mathematics 254, knowledge of the $C$ programming language.

Robotic systems including manipulators, actuators, sensors, and controllers. Kinematics of planar robots. Design and implementation of robot joint controllers. Robot programming languages and environments, and robot command interfaces.

## CS 558. Computer Simulation (3)

Prerequisites: Computer Science 310 and Statistics 550
Methodology of simulation for discrete and continuous dynamic systems. State-of-the-art programming techniques and languages. Statistical aspects of simulation. Students will design, program, execute, and document a simulation of their choice.

## CS 559. Computer Vision (3)

Prerequisites: Computer Science 310 and Mathematics 254.
Algorithms and computer methods for processing of images. Visual perception as a computational problem, image formation, characterization of images, feature extraction, regional and edge detection, computer architectures for machine vision.

## CS 560. Algorithms and Their Analysis (3)

Prerequisites: Computer Science 310 and Mathematics 245.
Algorithms for solving frequently occurring problems. Analysis techniques and solutions to recurrence relations. Searching and sorting algorithms. Graph problems (shortest paths, minimal spanning trees, graph search, etc.). NP complete problems. Not acceptable for the M.S. degree in Computer Science.

## CS 562. Automata Theory (3)

Prerequisite: Mathematics 245.
Definition of finite automata. Classification of finite automaton definable languages. Minimization of finite automata. Nondeterministic finite automata. Sequential machines with output. Regular sets and expressions. Introduction to grammars.

## CS 570. Operating Systems (3)

Prerequisites: Computer Science 310, 370, and knowledge of the C programming language.

File systems, processes, CPU scheduling, concurrent programming, memory management, protection. Relationship between the operating system and underlying architecture. Not acceptable for the M.S. degree in Computer Science.

## CS 572. Microprocessor Architecture (3)

Prerequisites: Computer Science 370 and knowledge of the $C$ programming language.

Architecture of state-of-the-art microprocessor. Internal pipeline, internal cache, external cache, and memory management. Programming a uniprocessor. Communication among computers in a distributed environment. Architecture and programming of a multiprocessor system.

## CS 574. Computer Security (3)

Prerequisites: Computer Science 310, Mathematics 245, and credit or concurrent registration in Computer Science 570

Principles of computer security and application of principles to operating systems, database systems, and computer networks. Topics include encryption techniques, access controls, and information flow controls.

CS 576. Computer Networks and Distributed Systems (3)
Prerequisite: Credit or concurrent registration in Computer Science 570.

Basic networking concepts to include seven-layer reference model, transmission media, addressing, subnetting and supernetting, networking devices, LANs and WANs, internetworking, distributed processing, and client-server model. Basic concepts and protocols of TCP/IP protocol suite and basic Internet services.

## CS 581. Computational Linguistics (3)

(Same course as Linguistics 581)
Prerequisite: Computer Science 320 or Linguistics 571 or 572 [or Big Data Analytics 572].

Basic concepts in computational linguistics including regular expressions, finite-state automata, finite-state transducers, weighted finite-state automata, and $n$-gram language models. Applications to phonology, orthography, morphology, syntax. Probabilistic models. Statistical techniques for speech recognition.
CS 582. Introduction to Speech Processing (3)
Prerequisite: Computer Science 310.
Fundamentals of speech processing and speech recognition. Physical aspects of speech production and perception. Mathematical models for speech recognition. Corpus development: data collection, processing, and evaluation. Applications of speech processing and associated research topics.

## CS 583. 3D Game Programming (3)

Prerequisite: Computer Science 310 or equivalent programming background.

Development of programming skills using software environment of a game engine and its scripting language. 3D concepts for game play, modeling, and programming. Roles needed in software development team. Contrast creation of original 3D object models for game world with incorporation of pre-created generic models.

## CS 596. Advanced Topics in Computer Science (1-4)

Prerequisite: Consent of instructor.
Selected topics in computer science. May be repeated with the approval of the instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

For additional courses useful to computer scientists, see:
Mathematics 340. Programming in Mathematics
Mathematics 542. Introduction to Computational Ordinary of Differential Equations
Mathematics 579. Combinatorics

# Construction Engineering 

OFFICE: Engineering 424
TELEPHONE: 619-594-6071
E-MAIL: ccee@sdsu.edu
WEBSITE: http://ccee.sdsu.edu
The undergraduate degree in Construction Engineering is accredited by the Engineering Accreditation Commission (EAC) of ABET, http://www.abet.org.

## Faculty

Chair: Supernak
Director of Construction Engineering: Mitropoulos
Director of Construction Engineering and Management: Alves
The AGC Paul S. Roel Chair in Construction Engineering and Management: Alves
The William E. Leonhard, Jr. Chair in Civil, Construction, and Environmental Engineering: Mladenov
Professors: Bayasi, Supernak
Associate Professors: Alves, Mitropoulos
Assistant Professor: Akhavian
Lecturer: Lakrori
Offered by the Department of Civil, Construction, and Environmental Engineering
Doctor of Philosophy degree in engineering sciences: (bioengineering), (electrical and computer engineering), (mechanical and aerospace engineering), (structural engineering).
Master of Engineering.
Master of Science degree in civil engineering.
Concentration in environmental engineering.
Major in civil engineering with the B.S. degree.
Major in construction engineering with the B.S. degree.
Major in environmental engineering with the B.S. degree.

## The J.R. Filanc Construction Engineering and Management Program

The J.R. Filanc Construction Engineering and Management Program is supported by an endowment established by a generous gift from Jane E. and Jack R. Filanc in memory of their daughter, Julia L. Filanc, a graduate of San Diego State University. Jack Filanc founded what would become J.R. Filanc Construction Company in 1952. The endowment supports faculty and students in the program, as well as the biannual J.R. Filanc Lecture in Construction Ethics.
J.R. Filanc Construction Company specializes in the construction of water treatment and wastewater treatment plants, pump stations, and other water-related facilities for cities and municipal agencies throughout the Southwest. Functioning as a pure general contractor, the company self-performs $70 \%$ of the work on its construction projects.

## The Associated General Contractors (AGC) Paul S. Roel Chair in Construction Engineering and Management <br> The AGC Paul S. Roel Chair in Construction Engineering and

 Management is funded with an endowment established by generous gifts from members of the Associated General Contractors in San Diego Chapter. Recognizing the need for expert construction professionals, the local construction community has invested considerable resources in this new degree program. In particular, the endowment is funded by a significant gift from Roel Construction, in honor of Paul S. Roel, the son of the company's founder and the man responsible for moving the family business to San Diego in 1959. The current appointee to the chair, Dr. Thais da Costa Alves, has been teaching and advising students, researching, and collaborating with construction companies toward the dissemination and implementation of lean, especially in the field of production planning and control at construction sites.
## The William E. Leonhard, Jr. Chair in Civil, Construction, and <br> Environmental Engineering

The William E. Leonhard, Jr. Chair in Civil, Construction, and Environmental Engineering is funded with an endowment created by generous gifts from William G. Leonhard, Jr. and his parents, William E. and Wyllis M. Leonhard. After Bill Leonhard graduated from San Diego State in 1964, he entered a career in the Air Force, rising to the rank of colonel. In January 1990, he retired from the Air Force, spent the next several years in private industry, and retired again in 1998.

The current chair, Dr. Natalie Mladenov, promotes excellence in undergraduate education, research in environmental engineering, and conducts scholarly activities on the topic of water quality in environmental engineering.

## Mission of the Department

The mission of the Department of Civil, Construction, and Environmental Engineering is to ensure student success by providing a high-quality education through focused instruction, research, and continuing professional development for the benefit of the engineering profession, the environment, and society.

The objective of the program is to give the student a basic knowledge of civil, construction, and environmental engineering, as well as the interdisciplinary background and skills to meaningfully participate in and contribute technical advances toward this profession. The program integrates technical aspects with studies in the social sciences and humanities to ensure appropriate sensitivity to socially related problems.

Instruction is given both at the undergraduate level, leading to the bachelor's degree, and at the graduate level, leading to the master's or doctoral degrees. The undergraduate program builds upon concepts of mathematics, physics, chemistry and basic engineering with specialized study in civil, construction, and environmental engineering. Engineering design is emphasized, particularly in conjunction with computer utilization and practical engineering problems. Aspects of safety and engineering ethics are woven throughout the program. Breadth and depth of social science and humanities studies is assured by department approved courses. Completion of the under-graduate degree prepares the student for an entry-level professional position in addition to informal or formal graduate studies.

Many students who complete the undergraduate programs of the department choose to continue their formal studies on a full- or part-time basis at San Diego State University or at another institution. (See the Graduate Bulletin for additional information.)

The civil, construction, and environmental engineering programs are enhanced through cooperation with the American Society of Civil Engineers, the American Public Works Association, the Associated General Contractors, the Chi Epsilon Civil Engineering Honor Society, and other national organizations who sponsor student chapters to further aid the student's professional development. The chapters at San Diego State University have won many awards in regional and national competition with other schools throughout the country.

## Program Educational Objectives

The construction engineering program is to reflect a collaborative effort between the construction industry and the university to provide an effective and vigorous workforce development for the continued growth of the San Diego region. Graduates of the construction engineering program will (1) be successful engineers in their respective fields of work; (2) be continually progressing in their chosen careers through formal and informal professional development; and (3) be contributing to their profession for the betterment of society and the environment.

## Transfer Credit

No credit will be given for upper division engineering coursework taken at an institution having an engineering program which has not been accredited by the Engineering Accreditation Commission (EAC) of ABET, unless the student successfully completes the first 12 units of engineering work attempted at this university. At that time, and upon recommendation of the department, unaccredited work will be evaluated for full or partial credit.

## The Major

Construction engineering is the application of engineering principles to the human endeavor of construction. The construction engineering major prepares students to undertake careers in the leadership of construction enterprises for all types of construction, including public and private sectors. It also provides an understanding of the interaction between society and the built environment and the ethical issues involved in that interaction.

Construction engineers are needed in both the private and public sectors. They are employed in a range of capacities across the industry, from construction managers, owner's representatives, project engineers, among others. The dynamic and rapid expansion of the regional, national, and global economies and the continued need for housing and other facilities will drive demand for the degree in the foreseeable future.

## Retention Policy

The engineering program expects all majors will make reasonable academic progress toward the degree. Engineering premajors who have either (1) completed major preparatory courses, earned 60 units, but have less than a 2.7 cumulative GPA or (2) earned 60 units but have not completed major preparatory courses and/or have less than a 2.7 cumulative GPA may be removed from the premajor and placed in undeclared.

## Impacted Program

The construction engineering major is an impacted program. To be admitted to the construction engineering major, students must meet the following criteria:
a. Complete with a grade of $C(2.0)$ or better: Civil Engineering 225; Chemistry 202 (or 200); Mathematics 150, 151; Physics 195, 196. These courses cannot be taken for credit/no credit (Cr/NC);
b. Have an overall cumulative GPA of 2.7.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Construction Engineering Major

With the B.S. Degree

## (Major Code: 09254) (SIMS Code: 442010)

This program requires 133 units to include general education. In addition, the number of units specified in each elective category represents a minimum requirement.

Preparation for the Major. Construction Engineering 101, 201, 215 (or Civil Engineering 121), 280; Accountancy 201; Biology 100 or 101; Chemistry 202 (or 200); Civil Engineering 160 (or Statistics 250), 218, 220, 225; Economics 102; Geological Sciences 100, 101; Mathematics 150, 151; Philosophy 101; Physics 195, 195L, 196. (59 units)

Civil Engineering 225; Chemistry 202 (or 200); Mathematics 150, 151; Physics 195, 196 must be completed with a grade of C (2.0) or better. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ).

General Education. Students with this major are required to take Philosophy 332 [or Sustainability 332] to satisfy three units
of upper division Humanities, IV.C. Students are strongly encouraged to take Spanish 101, 102, 201, 202, 211, 212, 281, or 282 to satisfy three units of Foundations of Learning, C. Humanities.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 44 upper division units to include Construction Engineering 301, 312, 320, 330, 340, 401, 479, 480, 590; Civil Engineering 301, 302, 321, 462, 463, 495; and three units selected from the following:

Technical Electives. Construction Engineering 520; Civil Engineering 421, 465, 523, 525, 528.

## Courses (CON E)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

NOTE: Proof of completion of prerequisites (copy of transcript) is required for all courses which list prerequisites.

## LOWER DIVISION COURSES

CON E 101. Construction and Culture (3) [GE]
Cultural context of construction, emphasizing its centrality in evolution and expansion of built environments as expressions of ethical and historical value systems. Relationship between culture, geography, construction materials, and built expressions of cultural legacy. Interdependence of built environment and society.

## CON E 102. Fundamentals of Construction Management (1)

Construction industry and its projects. Functions of main actors and phases of construction projects. Tasks performed by construction managers and how they relate to and impact projects. Common processes and technologies in construction management field.
CON E 201. Construction Concepts and Building Codes (3)
Concepts of control and information exchange in construction. Purpose and function of fundamental information flows, function, and development of construction-related codes and standards to protect public health and safety, compliance with requirements, and design using codes.
CON E 215. Virtual Design and Construction (3)
Two lectures and two hours of activity.
Building information modeling (BIM). Connectivity to other aspects of the construction enterprise to include estimating, planning, and scheduling deployment. Constructability review.
CON E 240. Introduction to Construction Materials (3)
Prerequisite: Physics 180A.
Properties of materials used for construction to include aggregate, ceramic, concrete asphalt, decorative and finish materials, soil, steel aluminum, and wood. Key material properties and material performance.

## CON E 262. Soil Mechanics (3)

Two lectures and three hours of laboratory.
Prerequisites: Mathematics 150 and Physics 180A with a grade of C (2.0) or better in each course.

Formation of soils. Classification of soils and their behavior. Compaction, consolidation, permeability, strength, and swelling.
CON E 280. Construction Methods (3)
One lecture and six hours of laboratory.
Components and methods of construction including earthwork; foundations; wood, steel, and concrete construction; roofing and cladding; interior construction. Field experience in conducting and/ or observing construction operations. Concepts of production in a construction setting.

## CON E 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

CON E 301. Construction Ethics, Law, and Contracts (3)
Prerequisites: Construction Engineering 101, 201, Philosophy 101.
Legal and ethical environment of construction. Study of documents and common procedures in construction administration and their legal and ethical contexts for general contractors and subcontractors. Contract documentation, claim in various construction delivery methods.

## CON E 312. Mechanical and Electrical Principles for

## Construction (3)

Two lectures and three hours of laboratory.
Prerequisites: Mathematics 150. For construction engineering majors: Physics 196. For construction management majors: Physics 180B.

Engineering principles for mechanical, electrical, plumbing systems. Thermodynamics, energy principles, psychometrics. Electrical theory, circuits, motors. Static and dynamic principles for fluids, pipe flow. Mechanical and plumbing equipment.

## CON E 320. Construction Estimating (3)

Two lectures and three hours of laboratory.
Prerequisites: Construction Engineering 280 and Mathematics 150.

Identifying and estimating time and cost requirements for construction operations based on drawings and specifications. Use computer applications for estimating.
CON E 330. Principles of Engineering Economy (3)
Prerequisite: Mathematics 150.
Mathematics of finance applied to engineering and managerial decision making. Framework for cost management in engineering and construction. (Formerly numbered Construction Engineering 430.)

CON E 340. Analysis and Design of Construction Operations (3) Prerequisites: Construction Engineering 320 and 330.
Properties and methods for use of construction equipment and integration into production system. Assessment of equipment needs and selection. Site utilization and layout planning, incorporating efficiency and safety of operations. (Formerly numbered Construction Engineering 310.)
CON E 350. Construction Project Controls (3)
Prerequisites: Construction Engineering 280, 330, and Accountancy 201.

Characteristics of the construction industry and impacts on project controls. Associated costs in business and construction projects. Lease or buy decisions, pricing of change orders, progress payments, and schedules of values.

## CON E 400. Preconstruction Management (3)

Prerequisites: Construction Engineering 350 and Business Administration 350.

Addressing general conditions, organizing site logistics, and project start-up. Assembling teams and defining contractual scopes of work. Organizing the pursuit of projects. Phases related to building a proposal.
CON E 401. Construction Planning and Scheduling (3)
Two lectures and three hours of laboratory.
Prerequisites: For construction engineering majors: Civil Engineering 160 and credit or concurrent registration in Construction Engineering 320. For civil engineering majors: Civil Engineering 160 and 321. For construction management majors: credit or concurrent registration in Construction Engineering 320 and Statistics 119.

Fundamentals of scheduling logic including critical path method, deterministic and probabilistic scheduling, and impact of constraints. Development of construction plan and representation in schedule format using common computer applications used in industry.

CON E 479. Construction Materials (3)
Two lectures and three hours of laboratory.
Prerequisites: Chemistry 202 (or 200) and Civil Engineering 301 (or Mechanical Engineering 304).

Selection, design and control of mixes of portland cement and asphalt concrete. Properties of these and other materials used in construction.
CON E 480. Design of Temporary Structures (3)
Prerequisites: Civil Engineering 321 and 462.
Design of structures for temporary support of constructed work, including scaffolding and formwork, bracing, and excavations. Influence of codes and standards on the design process, selection of degrees of safety, and concepts of liability.
CON E 495. Capstone Design Project (3)
One lecture and six hours of laboratory.
Prerequisites: Credit or concurrent registration in Construction Engineering 590 and for construction engineering majors: Construction Engineering 480. For construction management majors: Construction Engineering 400. Open to majors in construction engineering and construction management.

Application of engineering principles, design and management techniques to construction projects.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
CON E 520. Environmentally Conscious Construction (3)
Two lectures and three hours of laboratory.
Prerequisite: Construction Engineering 312 for construction engineering and construction management majors; Civil Engineering 444 for civil engineering majors; concurrent registration in Civil Engineering 495 for environmental engineering majors.

Design and design processes to target a sustainable structure. Construction practices associated with protection of environment. Application of industry standards for environmental and energy performance of buildings. Impacts on selection of methods, materials, and equipment for construction. Design of procurement and management systems to support environmentally conscious building. Commissioning and startup. (Formerly numbered Construction Engineering 420.)
CON E 590. Construction Management and Safety (3)
Prerequisites: Construction Engineering 330 and 401.
Management and control of critical project processes for construction projects. Definition, planning, and execution of projects based on plan, estimate, and bid documentation. Fundamentals of construction safety planning, design, and requirements. (Formerly numbered Construction Engineering 490.)

For additional courses in the construction engineering program, refer to "Civil Engineering" in this section of the catalog.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

## Counseling and School Psychology <br> \author{ In the College of Education 

}OFFICE: North Education 179
TELEPHONE: 619-594-6109 / FAX: 619-594-7025
WEBSITE: http://go.sdsu.edu/education/csp/
Accredited by the California Commission on Teacher Credentialing, Commission on Accreditation for Marriage and Family Therapy Education, and the National Association of School Psychologists.

## Faculty

Emeritus: Cummins, Feinberg, Hatch, Howard, Lim, Miller,
O'Shaughnessy, Ramage, Robinson-Zañartu, Senour, Terry-Guyer
Chair: Taylor
Professors: Chung, Ingraham, Green, Monk
Associate Professors: Butler-Byrd, Estrada, Lambros Ortega, Negash, Taylor, Tran
Assistant Professors: Leigh, Miller, Paz, Polanco

## Offered by the Department

Educational Specialist degree in school psychology.
Master of Arts degree in education.
Concentration in counseling.
Master of Science degree in counseling.
Concentration in marriage and family therapy.
Concentration in multicultural community counseling community-based block.
Concentration in school counseling.
Concentration in school psychology.
Pupil personnel:
School counseling credential.
School psychology credential.
Minor in counseling and social change.
Certificate in restorative justice practice and trauma-informed care (refer to the Graduate Bulletin).

## Counseling and Social Change Minor

(Minor Code: 08261) (SIMS Code: 331007)
The minor in counseling and social change consists of a minimum of 18 units, at least 12 units of which must be upper division selected from Counseling and School Psychology 320, 400, 401, 460, and three units selected from counseling and school psychology, child and family development, general studies, psychology, social work, sociology, or women's studies. Elective units must address central themes of the minor and be selected with consent of counseling and school psychology undergraduate adviser.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Courses (CSP)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
CSP 300. Stress Management and Life Planning (3) [GE]
Effects of stress on physical and psychological states and life choices. Stress management practices that contribute to optimal health and productive life planning.

## CSP 320. Counseling Skills and Practice (3)

Basic counseling skills with focus on how they affect and may be applied within cultural interactions and for social change.
CSP 400. Counseling and the Helping Professions (3)
Serves as an introduction to the field of counseling and introduces the student to those professions considered to be helping professions.

## CSP 401. Quest for Identity (3)

Impact of interpersonal, social, and cultural variables on understandings of self, relationships, and the world. Social construction of multiple identities. Meaning and salience of fluid identity development.
CSP 420. Popular Culture and Counseling (3) [GE]
Impact of popular culture on personal functioning and well-being. Meaning and salience of popular culture, social construction of popular culture in society, and convergence of popular culture and counseling.

## CSP 460. Counseling and Social Change (3)

Role counselors and helping professionals play in addressing social justice issues pertaining to race and ethnicity, disability, gender and sexual orientation, socioeconomic disadvantage and research.

## CSP 496. Experimental Topics (1-3)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## CSP 499. Special Study (1-3) Cr/NC

Prerequisites: Consent of instructor. Open only to senior and graduate students in education who have shown ability to work independently.

Individual study. Maximum credit six units.

## UPPER DIVISION COURSE

(Also Acceptable for Advanced Degrees)
CSP 596. Selected Studies (1-3)
Prerequisite: Consent of instructor.
A series of lecture and discussion sessions centering on current problems in counseling and guidance. Designed to serve the needs of any person desiring to keep informed of developments in this area. May be repeated with new content. See Class Schedule for specific content. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

[^11]
## Criminal Justice

OFFICE: Professional Studies and Fine Arts 100*
TELEPHONE: 619-594-6224 / FAX: 619-594-1165
*PSFA office locations are subject to change due to construction. Check the website at http://psfa.sdsu.edu for current office locations.

## Faculty

Emeritus: Boostrom, Gitchoff, Henderson, Henry, Sabath (SDSU-IV), Sutton
Director: Ryan
Professor: Kaplan
Associate Professors: Chanin, Mobley, Nurge, Welsh
Assistant Professors: Camargo (SDSU-IV), Janscics (SDSU-IV), Kras, Vann

## Offered by the School of Public Affairs

Major in criminal justice with the B.S. degree in applied arts and sciences.

## The Major

The purpose of the criminal justice program is to provide current and future decision-makers in criminal justice with the foundation for critical and balanced as well as responsible and effective administrative responses to crime. As the systems designed to deliver justice services are continually asked to accomplish more with fewer resources, the need for able and professional administrators becomes more pressing. The mission of the program is to provide graduates with the background knowledge and skills to meet these challenges.

Criminal justice majors with the B.S. degree have typically found employment in local, state, and federal criminal justice agencies or in private business or security positions (e.g., loss prevention). At the local level, graduates can begin service in various capacities with police, sheriff's and marshal's offices, probation, county supervisors, city administration, and criminal justice planning agencies. At the state level, graduates may enter the Highway Patrol, Alcohol Beverage Control, Attorney General's Office, Department of Corrections, California Youth Authority, or related agencies. At the federal level, graduates are employed in agencies such as the FBI, Customs Service, Border Patrol, Secret Service, Drug Enforcement Agency, Naval Intelligence Service, Defense Investigative Services, Homeland Security, and Alcohol, Tobacco and Firearms (ATF).

A significant number of graduates of this degree program also enter law school after graduation or go on to graduate programs.

## Impacted Program

The criminal justice major is an impacted program. To be admitted to the criminal justice major, students must meet the following criteria:
a. Complete with a grade of C (2.0) or better: Political Science 102; Sociology 101 and 102; and a 3-unit course in elementary statistics. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Complete a minimum of 60 transferable semester units;
c. Have a cumulative GPA of 2.80 or better.

To complete the major, students must fulfill the degree requirements described in the catalog in effect at the time they are accepted into the premajor or major at SDSU and must be continuously enrolled.

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education courses will also fulfill a major preparation course requirements.

## Criminal Justice Major

With the B.S. Degree in Applied Arts and Sciences
(Major Code: 21051) (SIMS Code: 666925)
(SIMS Code: 666927-SDSU Global Campus)
All candidates for a degree in applied arts and sciences must complete the graduation requirements in the section of this catalog on "Graduation Requirements."

The criminal justice major is also offered fully online through admission to the SDSU Global Campus criminal justice degree completion program.

A minor is not required with this major, but is allowed.
Preparation for the Major. Political Science 102, Sociology 101 and 102, and a three-unit course in elementary statistics (e.g., Sociology 201, Statistics 119, 250). (12 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$. The minimum grade in each class is $C$.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of $C$ (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Criminal Justice 300, 301, 302, 303, 540, and one criminal justice practicum course selected from Criminal Justice 497, 498, 543, 550; International Security and Conflict Resolution 450. Additionally, students must complete two upper division three-unit elective courses in public administration. Students must complete 12 additional upper division units in accordance with the major academic plan, to include a minimum of six units of criminal justice electives.

Master Plan. Students should follow the Master Plan Advising Guide to ensure completion of major requirements. Contact the School of Public Affairs for a copy of the guide or download it at https://spa.sdsu.edu/student_experience/advising.

## Courses (CJ)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## UPPER DIVISION COURSES

(Intended for Undergraduates)

## CJ 300. Crime, Law, and Justice (3)

Prerequisite: Admission to the major or consent of instructor (nonmajors only).

Criminal justice-role of law in society, definition and explanations of criminal behavior, criminal justice system, methods of research, and policy.

## CJ 301. Law in Society (3)

Prerequisite: Criminal Justice 300.
Theoretical study of law in society from classical social theorists. Major movements in legal studies during the last century. Comparative systems of law.

## CJ 302. Crime and Behavior (3)

Prerequisite: Criminal Justice 300.
Major disciplinary paradigms used both to explain criminal behavior and to inform official criminal justice policy.
CJ 303. Criminal Justice and Social Control (3)
Prerequisite: Credit or concurrent registration in Criminal Justice 300.

Interrelationship of social control, social policy and administration of criminal justice in contemporary American society.

## CJ 305. Professions and Ethics (3)

Prerequisite: Criminal Justice 300.
Professional roles and responsibilities of practitioners and administrators in criminal justice agencies, including consideration of the ethical responsibilities of criminal justice practitioners.

## CJ 310. Law Enforcement (3)

Prerequisite: Criminal Justice 300.
Administrative relationships within the criminal justice process with special reference to problems of courts and police and probation agencies.

## CJ 320. Criminal Law (3)

Prerequisite: Criminal Justice 300.
Constitutional law principles as implemented in criminal courts with emphasis on critical analysis of factual situations and the argument of legal issues in criminal cases from both defense and prosecution perspectives.

## CJ 321. Juvenile Justice (3)

Prerequisite: Criminal Justice 300.
Assessment of the structure and functions of agencies and institutions which comprise the juvenile justice system in America; evolution of policies and programs for prevention of delinquency and treatment of the juvenile offender.

## CJ 330. Corrections (3)

Prerequisite: Criminal Justice 300.
Contemporary policies and practices of local, state, and federal correctional agencies, influence of reform movements, and the interrelationship of corrections with other criminal justice system components.

## CJ 333. The Judiciary (3)

Actors, institutions, and rules that define the judicial branch of government in the United States. Role of judges and judicial deci-sion-making, trial process, and court unification and financing.
CJ 420. Constitutional Issues in Criminal Justice (3) Prerequisite: Criminal Justice 300.
Constitutional legal theories and principles, especially the Fourth, Fifth, Sixth, and Eighth Amendments to the Constitution, as they affect criminal justice procedures and practices.

## CJ 431. Field Study in Local Corrections (3) Cr/NC

Prerequisites: Criminal Justice 330; 18 years of age; no convictions or pending charges.

Structure, function, and mission of local prisons and jails. Legal authority under which accused and convicted offenders are detained. Prison life, prison culture, gangs, and survival behind bars. Lives and careers of correctional staff. On-site visits.

## CJ 496. Selected Topics in Criminal Justice (1-3)

Selected current topics in criminal justice. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

## CJ 497. Investigation and Report (3)

Prerequisites: Consent of instructor and senior standing.
Using library, Internet, and empirical research. Analysis of current criminal justice policy issues.

## CJ 498. Internship in Criminal Justice (2-6) Cr/NC

Students are assigned to various government agencies and work under joint supervision of agency heads and the course instructor. Participation in staff and internship conferences. Maximum credit six units.
CJ 499. Special Study (1-3) Cr/NC
Prerequisites: Twelve units of upper division criminal justice and consent of instructor.

Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
CJ 510. Contemporary Issues in Law Enforcement (3)
Prerequisite: Criminal Justice 310.
Assessment of problems confronting administrators of law enforcement agencies and of recent efforts to enhance the capability of agencies to control criminal activity while guarding individual liberties.

CJ 520. Prosecutorial Function (3)
Prerequisite: Criminal Justice 300.
Prosecutor's function at local, state, and federal levels and in selected foreign nations, including appraisal of proposed national standards and goals for prosecutors.
CJ 531. Probation and Parole (3)
Prerequisite: Criminal Justice 300.
Basic concepts, history, legislation, and practices used in work with juveniles and adults who have been placed on probation or parole; criteria of selection, methods of supervision, and elements of case reporting.
CJ 540. Applied Planning, Research, and Program Evaluation in Criminal Justice (3)
Prerequisite: Criminal Justice 300.
Application of planning, research, program development, and evaluation principles to field of criminal justice.
CJ 543. Community Resources in Criminal Justice (3)
Prerequisite: Criminal Justice 300.
Present and probable roles of public and private agencies and volunteers in criminal justice.
CJ 550. Study Abroad: Criminal Justice (3)
Prerequisites: Criminal Justice 301 and upper division standing.
Selected topics in comparative criminal justice. Course taught abroad. May be repeated once with new content. See Class Schedule for specific content. Maximum credit six units.
CJ 570. Organized Crime: Domestic and International Perspectives (3)
Prerequisite: Criminal Justice 300.
Interdisciplinary analysis of organized crime's impact on criminal justice and public policy on both domestic and international levels.
CJ 571. Drugs: Domestic and International Perspectives (3)
Prerequisite: Upper division major or graduate standing.
Interdisciplinary social science analysis of illicit drug use, markets, and trafficking. Comparative assessment of the efforts of state and non-state actors to regulate, counter, and disrupt illicit drug use, markets, and trafficking.
CJ 572. Dark Networks, Crime, and Security (3)
Prerequisites: Upper division major or graduate standing and Criminal Justice 570.

Advanced interdisciplinary social science analysis of social networks engaged in criminal activity and intelligence and security policies, as well as the actors that comprise these networks. Social network and structural analysis methods.
CJ 583. Cultural Criminology (3)
Prerequisite: Criminal Justice 302.
Cultural expressions and meanings of law breaking, law enforcement, and law making.
CJ 596. Selected Topics in Criminal Justice (1-3)
Prerequisite: Criminal Justice 300.
Selected current topics in criminal justice. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

OFFICE: Music 112*
TELEPHONE: 619-594-6031 / FAX: 619-594-1692
E-MAIL: music.dance@sdsu.edu

## Faculty

Emeritus: Hempel, Nunn, Sandback, Willis
Director: Lipscomb
Division Coordinator: Seiters
Professor: Seiters
Associate Professors: Alter, Humphrey
Assistant Professor: Oh
Lecturer: Irey

## Offered by the School of Music and Dance

Major in dance with the B.F.A. degree in applied arts and sciences. Major in dance with the B.A. degree in liberal arts and sciences.
Minor in dance.
Minor in somatic studies.

## The Major

Dance serves to enhance the lives of all peoples and provides a challenging avenue of creative expression for those who wish to pursue its serious study. This program promotes dance as a communicative and expressive medium uniquely effective in the conveyance of meaning, emotion, and cultural values. Dance is a rigorous and specialized area of the performing arts, demanding a high level of physical preparation as well as a thorough understanding of aesthetics.

The Bachelor of Fine Arts in Dance provides professional preparation for dance majors in choreography, performance, scholarship, and teaching; more specifically, as choreographers and dancers with professional companies, teachers in community and recreation programs, schools and colleges, movement educators, and candidates for graduate work in dance scholarship.

The Bachelor of Arts in Dance is a liberal arts degree for those students who seek an understanding of and an intimate orientation to the discipline of dance without professional goals. This degree enables students to obtain this broad understanding.

A minor in somatic studies is available in addition to the dance minor for those students whose primary interest is in another department.

As members of the University Dance Company, students perform in faculty choreography and repertory works set by distinguished guest artists in periodic workshops and residencies. Each B.F.A. student also stages original work in a senior concert. Dance activity courses provided in the school offer experiences for the general student population in contemporary modern and ballet.

## Entrance and Progression Requirements

In addition to CSU and SDSU requirements, incoming students requesting the B.F.A. program in Dance will be required to perform an audition before the faculty in order to be admitted to the program. The audition will consist of:

- A technique class to include learning/repeating movement phrases, moving through space, and preparation.
- Guided processes of collaborating, making, and performing.
- The following qualities will be assessed:
- Basic technical skills in aptitude for learning, comprehension and application of instructions, and dance.
- Attentiveness, focus, presence, and quality of engagement.
- Ability to articulate desire to dance in college and interest in SDSU's dance program.

In order to continue in the B.F.A. program in dance, students must demonstrate continuing progress in all areas of skill development, choreography, musical assessment, etc., in the following ways:

- Successful completion of all coursework as assessed through written examination and through continuous performance evaluation each semester.
- A commitment and respect for the disciplined study of dance and participation in a supportive learning environment.
- Junior Level Review: Students must successfully pass this review to continue into the junior year. Faculty will formally review coursework and meet individually with students to assess progress and quality of participation in the major.


## Impacted Program

The dance major is an impacted program. To be admitted to the dance major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Dance Major

With the B.F.A. Degree in Applied Arts and Sciences

## (Major Code: 10082) (SIMS Code: 666571)

All candidates for a bachelor of fine arts degree must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." The maximum number of upper division units in dance courses acceptable toward the bachelor of fine arts degree is 70 .

Entrance and placement auditions are required.
A minor is not required with this major.
All dance majors are required to crew performances. Refer to the Dance Student Handbook for detailed information.

All dance majors sign an agreement to enroll in required courses during their first year in the program.

For information regarding this program contact the School of Music and Dance.

Preparation for the Major. Dance 100D (one unit), 140, 145, 156, 171, 181, 190 (one unit), 210 (two units), 221 (four units), 242 (six units), 243 (four units), 245, 289, 290 [or Music 290] (two units); Biology 100. (39 units)

Dance 100D, 156, 190, 242, 243, 290 [or Music 290] must be completed with a grade of $C(2.0)$ or better.

To qualify for upper division study, students must pass a Junior Level Review.

Language Requirement. Competency (equivalent to that which is normally attained in two semesters of college study) in a foreign language.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 40 upper division units to include Dance 300 (one unit), 345, 356 (one unit), 365 (two units), 371, 380, 385, 390 [or Music 390] (one unit), 410 (two units), 421 (four units), 442 (eight units), 443 (three units), 453, 471, 481; and two additional units from Dance 356 and/or 390 [or Music 390].

## Dance Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 10081) (SIMS Code: 666517)
All candidates for a degree in liberal arts and sciences must complete the requirements listed in the section of this catalog on "Graduation Requirements." No more than 59 units in dance courses can apply to the degree.

Entrance and placement auditions are required.
A minor is not required with this major.
All dance majors are required to crew performances. Refer to the Dance Student Handbook for detailed information.

For information regarding this program contact the dance coordinator or the School of Music and Dance.

Preparation for the Major. Dance 100D (one unit), 140, 145, 156, 171, 181, 190 (one unit), 210 (two units), 221 (four units), 242 (four units), 243 (two units), 281, 289, 290 [or Music 290] (two units); Biology 100. (35 units)

Dance 100D, 156, 190, 242, 243, 290 [or Music 290] must be completed with a grade of $C(2.0)$ or better.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to the section of this catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 25 units to include Dance 300 (one unit), 356 (one unit), 371, 380, 385, 390 [or Music 390] (one unit), 410 (two units), 421 (four units), 442 (four units), 443 (two units), 481; and one to three performance units selected from Dance 365 , 410 , and 453.

## Dance Minor

(Minor Code: 10081) (SIMS Code: 666516)
Entrance and placement auditions are required.
For information regarding this program contact the dance coordinator or the School of Music and Dance.

The minor in dance consists of a minimum of 17-21 units in dance, to include Dance 100D (one unit), 100I, 156, 181, 221 (two units), and 382. Remaining units, of which six must be in upper division, selected from Dance 145, 190, 210, 242, 243, 281, 289, 290 [or Music 290], 300, 356, 365 (by audition only), 371*, 380, 390 [or Music 390], 410, 421, 442, 443, 471*, and 481.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. Students in the minor shall consult an adviser to select coursework appropriate to a focus area. A minimum of six upper division units must be completed in residence at San Diego State University.

## *Additional prerequisite required

## Somatic Studies Minor

## (Minor Code: 10081) (SIMS Code: 666572)

Entrance does not require experience or expertise in dance; however, an interview with dance faculty is required.

Courses in the somatic studies minor, while listed in dance, are not specifically directed toward artistic goals. The movement techniques taught in the minor are designed to increase self-awareness through a process of embodied inquiry.

The minor in somatic studies consists of a minimum of 24 units to include Dance 100D (two units), 156, 190 (one unit), 289, 290 [or Music 290] (two units), 356 (three units), 390 [or Music 390] (three units), Biology 100, Counseling and School Psychology 401, and three units of upper division dance electives with approval of adviser.

The minor in somatic studies is not open to students in the B.A., B.F.A., or minor in dance.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Courses (DANCE)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

DANCE 100. Dance Activity (1)
Two hours of activity.
Open to all students. Provides physically skilled instruction and knowledge of yoga and modern dance forms.
D. Yoga for Dancers. Maximum credit three units.
I. Beginning Modern Dance.

DANCE 140. Freshman Seminar (1)
Introduction to concepts, theories, and best current practices of dance as a contemporary art form.

## DANCE 145. Dancemaking I (3)

Six hours of activity.
Practice of compositional, generative, and performance aspects of dancemaking from classical to contemporary perspectives. Ecosystem of encouragement, learning, and support through shared processes of making dances. Not open to students with credit in Dance 253, 255, and 256. (Formerly numbered Dance 250, or 253 and 255 , or 253 and 256.)
DANCE 153. Performance in Capstone (1)
Two hours of activity.
Performers in aesthetic, logistical, procedural, and theoretical considerations. Students admitted through audition will perform in capstone projects.
DANCE 156. Contact Improvisation I (1)
Two hours of activity.
Somatic perspectives on gravity, momentum, weight sharing, and other laws of physics. Duet improvisational skills to include partnering that requires immediacy, responsiveness, and trust.
DANCE 171. Digital Production Technology for Dancers (2)
One lecture and two hours of activity.
Digital media and technical applications as applied to dance production.
DANCE 181. Introduction to Dance (3) [GE]
Foundations of dance in Western civilization. Dance as art, therapy, fitness, ritual, and social discourse. Analysis of dance in film, video, and live performance with an appreciation for artistic intent, technique, and style.
DANCE 190. Somatic Movement Practices I (1)
Two hours of activity.
Body-mind practices focused on first-person experience of movement. Awareness of sensations and perceptions are cultivated through the practice of somatic systems to include Bartenieff Fundamentals, Body-Mind Centering, and the Feldenkrais Method. Maximum credit three units.
DANCE 210. Performance Forum (2)
One lecture and two hours of activity.
Prerequisite: Consent of instructor.
Dance master classes, workshops, as related to dance performance, style, and repertoire. Maximum credit four units.

## DANCE 221. Ballet I (2)

Four hours of activity.
Ballet skills for dance majors and minors emphasizing placement, coordination, ballet terminology, and technical principles. Maximum credit four units.

DANCE 242. Dance Techniques I (2)
Four hours of activity.
Classical, contemporary, cultural, and popular dance forms. Limit of 12 units of any combination of Dance $241,242,243$ courses applicable to a bachelor's degree. Maximum credit 10 units.
DANCE 243. Applied Dance Techniques (1)
Two hours of activity.
Application of classical, contemporary, cultural, and popular dance forms. Limit of 12 units of any combination of Dance 241, 242, 243 courses applicable to a bachelor's degree. Maximum credit 10 units.
DANCE 245. Dancemaking II (3)
Six hours of activity.
Prerequisite: Dance 145.
Continued practice of compositional, generative, and performance aspects of dancemaking from classical to contemporary perspectives. Ecosystem of encouragement, learning, and support through shared processes of making dances. (Formerly numbered Dance 350, or 353 and 354.)
DANCE 281. Dance, Popular Culture, and Identity (3) [GE]
Psychological, sociocultural, and therapeutic functions of dance across the world from ancient ritual to contemporary pop culture as a way of understanding basic human activity and lifelong learning via arts.
DANCE 289. Embodied Anatomy (3)
Two lectures and two hours of activity.
Prerequisite: Biology 100.
Experiential and empirical overview of human anatomy and kinesiology. Movement and awareness practices from contemplative and somatic methodologies facilitating subjective, first-person study. Objective analyses include images, models, and physical demonstrations of basic biomechanics.

## DANCE 290. Body Modalities (2)

(Same course as Music 290)
One lecture and two hours of activity.
Alternative movement theory systems including an introduction to body modalities of yoga, Pilates, ideokinesis, Alexander and Feldenkrais techniques, Laban movement analysis and authentic movement. Maximum credit four units.
DANCE 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## DANCE 299. Special Study (3)

Prerequisites: Consent of School of Music and Dance director and instructor.

Individual study.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

DANCE 300. Advanced Yoga for Dancer (1)
Two hours of activity.
Prerequisite: Dance 100D with a grade of $C$ (2.0) or better.
Anatomical awareness, breathing and meditation techniques, and use of imagery to integrate functional and creative potential. Maximum credit three units.
DANCE 345. Dancemaking III (3)
Six hours of activity.
Prerequisites: Dance 245 and upper division standing in dance.
Traditional and contemporary methods, practices, and principles of choreography and improvisational dancemaking. Practices and orchestrations of all aspects of composition and dance performance.

## DANCE 356. Contact Improvisation II (1)

Two hours of activity.
Prerequisite: Dance 156 with a grade of $C(2.0)$ or better.
Continuing somatic approaches to gravity, momentum, weight sharing, and other laws of physics. Further development to duet improvisational skills to include partnering that requires immediacy, responsiveness, and trust. Maximum credit three units.

## DANCE 365. University Dance Company: Major

Performance (1-2) Cr/NC
More than three hours of activity per week.
Prerequisites: Open only to dance majors. Audition and approval by dance faculty.

Practical experience in University Dance Company including concert performances of dance repertory, production of choreographic works, presentation of master classes and workshops, and participation in major production. Students must enroll in a minimum of two semesters. Maximum credit six units.
DANCE 371. Video Dance Production (2)
One lecture and two hours of activity.
Prerequisite: Dance 171.
Technical applications as applied to dance and dance production. Continuation of Dance 171.
DANCE 380. Dance History: Contemporary Global Contexts (3)
Prerequisite: Dance 181.
History of dance from early twentieth century to present in a global context. Political, economic, and cultural forces that have shaped the development of contemporary dance as an art form.

## DANCE 382. Dance in World Cultures (3) [GE]

Dance in selected cultures; geographic, historical, social, and aesthetic factors which have shaped development and function.

## DANCE 385. Dance Pedagogy (2)

Four hours of activity.
Prerequisites: Upper division standing and passing junior level assessment.

Teaching theory as applied to ballet and modern dance for adult populations.
DANCE 390. Somatic Movement Practices II (1)

## (Same course as Music 390)

Two hours of activity.
Prerequisites: Dance 190 and 290 [or Music 290] with a grade of $C(2.0)$ or better in each course.

Continuing body-mind practices focused on first-person experience of movement. Increasing awareness of sensations and perceptions cultivated through additional practices of somatic systems to include Bartenieff Fundamentals, Body-Mind Centering, and Feldenkrais Method. Maximum credit three units.

DANCE 398. Dance Internship (1-3) Cr/NC
Prerequisites: Upper division standing and consent of dance director. Open only to dance majors and minors.

Supervised practical experience in dance studio management and instruction. Maximum credit three units.

## DANCE 410. Performance Forum (2)

One lecture and two hours of activity.
Prerequisite: Consent of instructor.
Dance master classes, workshops, as related to dance performance, style, repertoire. Maximum credit four units.

## DANCE 421. Ballet II (2)

Four hours of activity.
Prerequisite: Dance 221.
Ballet skills for dance majors emphasizing turns, jumps, batterie, extended sequences, and movement quality. Maximum credit four units.
DANCE 442. Dance Techniques II (2)
Four hours of activity.
Prerequisite: Dance 242 with a grade of C (2.0) or better.
Maintaining integrity of dance technique while performing. Maximum credit 10 units.
DANCE 443. Applied Dance Techniques II (1)
Two hours of activity.
Prerequisite: Dance 243 with a grade of $C(2.0)$ or better.
Application of classical, contemporary, cultural, and popular advanced dance forms. Maximum credit 10 units.

## DANCE 453. Senior Capstone (2)

One lecture and two hours of activity.
Prerequisite: Dance 345.
Choreography of solo and group works utilizing symbiotic relationship of movement, sound, lighting, costuming, and other interdisciplinary media. Presentation of a concert.
DANCE 471. Digital Media Dance Production (2)
One lecture and two hours of activity.
Prerequisite: Dance 371.
Lighting, set, multi-media, and design for dance. Study of concert multi-media and production for dance.
DANCE 481. Dance Aesthetics and Criticism (2)
Prerequisite: Dance 380.
Philosophy and aesthetics of dance. Historical foundations of dance criticism. Major contemporary schools of thought. Professional preparation and function of the dance critic.

## DANCE 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## DANCE 499. Special Study (1-3)

Prerequisite: Consent of the dance director.
Individual study. Maximum credit six units.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

# Dual Language and English Learner Education 

OFFICE: Education and Business Administration 248
TELEPHONE: 619-594-5155 / FAX: 619-594-1183
WEBSITE: http://go.sdsu.edu/education/dle
Accredited by the California Commission on Teacher Credentialing.

## Faculty

Emeritus: Aste, Cadiero-Kaplan, Espinosa, Jones, Kuhlman, Ochoa
Chair: Machado-Casas
Professors: Alfaro, Machado-Casas
Associate Professor: Esquinca
Assistant Professors: Hernandez, Maldonado
Lecturers: Buell, Collins-Parks, Froehbrodt, Jullié, Maheronnaghsh, Ramirez, Waldron

## Offered by the Department

Master of Arts degree in education.
Concentration in dual language and English learner education
Multiple subject bilingual teaching credential.
Single subject bilingual teaching credential.
Bilingual multiple subject and special education credential (refer to the Graduate Bulletin).
Dual language for academic literacy certificate (refer to the Graduate Bulletin).
English language development for academic literacy certificate (refer to the Graduate Bulletin).
Bilingual added authorization with an emphasis in biliteracy for K-12 credential (refer to the Graduate Bulletin).

## The Major

The Dual Language and English Learner Education (DLE) Department offers programs leading toward the bilingual credential for single and multiple subject (secondary and elementary).

The Dual Language and English Learner Education Department and the College of Education is committed to the preparation of teachers for bilingual authorization as the most desirable credential in California. Furthermore, the university is committed to developing leaders in cultural, economic, educational, scientific, social, and technical fields, as well as addressing the linguistic diversity of school communities. The university is primarily responsive to the people of California, as well as to the needs of the regional, national, and international communities it serves.

## Global Learning Experience Requirement

All candidates in the Dual Language and English Learner Education multiple and single subject programs are required to participate in an organized experience working with students across the border. This requirement consists of two weekends or four days, one week prior to the beginning of the semester or during the first two weeks of the semester. Candidates work in small groups to create lesson plans to be implemented in Tecate or Tijuana, Mexico. This experience will give candidates the opportunity to work with border students in a Mexican school setting, practice lesson planning, and create community amongst cohort and faculty. Details for the experience will be provided upon acceptance to the program.

## Multiple Subject Bilingual 2042 Credential (Elementary K-6 Education) <br> (Credential Code: 00200)

The Multiple Subject Bilingual 2042 Credential (Elementary K -6 Education) is available to students interested in teaching in a bilingual Spanish, Arabic, Filipino, Japanese, or Mandarin elementary school classroom. This credential authorizes the holder to teach in any self-contained bilingual or regular classroom in which one teacher is responsible for all the subjects commonly taught in the elementary schools. Because courses on methods of teaching subject areas are taught in Spanish, Arabic, Filipino, Japanese, or Mandarin, as well as English, candidates must meet the respective language of emphasis proficiency requirements as outlined below.

Candidates who will pursue this credential need to specify "Multiple Subject Credential-Bilingual" in the application for graduate admission to SDSU(Code:00200). Students applying for admission should electronically submit the university application available at http://www.calstate.edu/apply along with the application fee.

All applicants must submit admissions materials separately to SDSU Graduate Admissions and to the Dual Language and English Learner Education Department.

## Graduate Admissions

The following materials should be submitted electronically or as a complete package directly to:

## Graduate Admissions

Enrollment Services
San Diego State University
San Diego, CA 92182-7416

1. Official transcripts (in sealed envelopes) from all postsecondary institutions attended;

## NOTE:

- Students who attended SDSU need only submit transcripts for work completed since last attendance.
- Students with international coursework must submit both the official transcript and proof of degree. If documents are in a language other than English, they must be accompanied by a certified English translation.

2. TOEFL score, if medium of instruction was in a language other than English (http://www.ets.org, SDSU institution code 4682).
Dual Language and English Learner Education Department
3. Complete department application at http://go.sdsu.edu/ education/apply-now.aspx;
4. California Basic Educational Skills Test (CBEST) scores;
5. Demonstration of Language and Cultural Proficiency:

- Arabic: Copy of CSET LOTE subtests II and V for language of emphasis;
- Filipino: Copy of CSET LOTE subtests II and V (test codes 191 and 255 respectively) for language of emphasis;
- Japanese: Copy of CSET LOTE subtests III and V (test codes 159 and 260 respectively) for language of emphasis;
- Mandarin: Copy of CSET LOTE subtests III and V for language of emphasis;
- Spanish: Completion of DLE 416 with a grade of C (2.0) or better or copies of CSET LOTE subtests III and V for language of emphasis;
- World Languages: Copy of CSET LOTE subtest IV (test code 250) for language of emphasis;

4. TB test results;
5. Two letters of recommendation, one of which must be from an elementary teacher if multiple subject or from a secondary teacher if single subject;
6. Verification of early field experience ( 30 hours for multiple subject) or completion of DLE 416L;
7. Certificate of clearance (live scan);
8. CPR that includes infant/child/adult;
9. Autobiography/Goals and Philosophy. Candidates must complete a 1-1/2 page essay of their goals and philosophy in education and a 1-1/2 page autobiography. One should be written in the language of emphasis and the other in English;
10. California Subject Examination for Teachers (CSET) scores.

## Standards for Admission

1. CBEST. Students must pass the California Basic Educational Skills Test prior to admission to the bilingual credential program. This examination is required by the Commission on Teacher Credentialing. Booklets containing registration forms and test information are available at http://www.cbest.nesinc.com.
2. Subject Matter Competency. Students must verify completion of subject matter competency in diversified subjects commonly taught in self-contained classrooms prior to admission to the bilingual credential program. To be admitted to the bilingual credential program, a candidate shall have achieved a passing score on the California Subject Examination for Teachers (CSET) that is required for the credential sought. Registration information and materials for the CSET are available at http://www.ctcexams.nesinc. com.
3. Prerequisite Courses. The following courses must be completed with a grade of C (2.0) or better prior to admission to the program, but may be in progress at the time of application or taken in the term immediately prior to the program start date.
Liberal Studies Majors.
Multilingual Education: Theory and Practice
DLE 515
Mor Biliteracy Teachers....................................... 3

TE 280 Health Education for Teachers..........................
Non-Liberal Studies Majors (must take the above and below prerequisite).
MATH 210** Number Systems in Elementary Education......... 3
${ }^{* *}$ With approval of the mathematics adviser, any of the following mathematics courses may be substituted for Mathematics 210: Mathematics 124, 150, 312.
4. Grade Point Average. Candidates must have cumulative grade point averages (GPAs) within the upper one-half of undergraduate students in the candidates' majors. GPAs vary according to discipline and graduating institution. GPA requirements are available in the Office of Student Services, EBA-259, 619-594-6320, coeadvis@sdsu.edu. Candidates must have attained a grade point average of at least 2.67 overall or 2.75 in the last 60 semester or 90 quarter units attempted. Candidates are required to submit official transcripts from all colleges and universities attended and unofficial SDSU transcripts for GPA calculations.
5. Letter of Recommendation. Two professional references and one letter of recommendation must be submitted attesting to the applicants following characteristics: (a) attitude, aptitude and ability to teach children; (b) personality and character; (c) academic ability. At least one letter should be from an elementary school teacher the student has worked with and the others may be from faculty and administrators.
6. Tuberculin Clearance. Evidence of a negative tuberculosis test (these tests are valid for four years and must be in effect during the time that candidates are enrolled in the credential program). Clearance statements may be secured from Health Services, private physicians or HMOs, or public health agencies.
7. Early Field Experience. Applicants must provide evidence of a minimum of 30 hours of experience with students in typical elementary classroom settings within the last three years or successful completion of DLE 416L. Evidence must be documented.
8. Written Statement of Professional Goals and Philosophy and Interview. In addition to their written statement of goals and philosophy, candidates will have an interview with the admissions and retention committee of the DLE Department.
9. California Certificate of Clearance. This certificate represents a background clearance and check conducted by the State Department of Justice and Federal Bureau of Investigation. Turnaround time for the clearance can take as long as eight months. Possessors of K -12 California credentials may satisfy this requirement by submitting copies of those certificates. Candidates must submit the application directly to the California Commission on Teacher Credentialing. A copy of the application must be provided to the DLE Department.
10. Credential Advising Appointment. Each applicant must attend an advising session at the Office of Student Services. Appointments can be made in EBA-259, 619-5946320, coeadvis@sdsu.edu. Afterward, we recommend applicants visit the Dual Language and English Learner Education (DLE) office in EBA-248 or call 619-594-5155 to make an appointment with a faculty adviser.
11. Language and Culture Proficiency. All candidates must meet Language Proficiency and Cultural Awareness requirements for the language of emphasis to meet their specific Bilingual Authorization through DLE 416 or CSET LOTE examinations III and V.
12. Reading Instruction Competence Assessment (RICA). California Education Code Section 44283 requires that candidates for the preliminary or clear credential multiple subject pass this RICA requirement. The purpose of this assessment is to ensure that the candidate possess the knowledge and skills important for the provision of effective reading instruction to students. The RICA requirement applies to candidates who did not complete all credential requirements prior to October 1, 1998. Candidates must have passed the RICA in order to be able to file for the credential.
13. Appeals Process. Candidates who do not meet all the admission requirements may petition the DLE Department Admissions and Retention Committee for individual consideration; petition letters must be submitted concurrently with the application packets.
14. Application. Applicants should complete application procedures the semester prior to beginning the credential program. Check the department website for current deadline information: http://go.sdsu.edu/education/dle/bilingual_credential. aspx.
In addition to the minimum admissions standards identified above, the DLE Department Admissions and Retention Committee may also consider qualifications such as previous teaching experience and relevant working experience with children. Due to the number of applicants, application to the program does not ensure admission.

After admission, students will meet with the program coordinator to plan an appropriate program.
Multiple Subject Bilingual 2042 Program ..... Units
DLE 523 Psychological Foundations for Biliteracy Teachers in K-6 Classrooms .....  3
DLE 532 Biliteracy Teaching in Language Arts for Elementary Students ..... 3
DLE 910 Teaching Mathematics to Bilingual Students ..... 3
DLE 911 Teaching Social Studies to Bilingual Students... 3 ..... 3
DLE 912 Teaching Science to Bilingual Students
DLE 915A Teaching and Learning in the Content Area:English Language Development/SDAIE:Multiple Subjects3
DLE 931 Skills in Teaching Reading to Bilingual Elementary Students ..... 3
DLE 954 Classroom Organization for Democratic Teaching in Bilingual Classrooms ..... 1-4
DLE 960 Professional Seminar for Bilingual Teacher Candidates ( $\mathrm{Cr} / \mathrm{NC}$ ) ..... 1-4
DLE 961 Practicum in Elementary Bilingual Classroom ( $\mathrm{Cr} / \mathrm{NC}$ ). ..... 1-12
DLE 962 Student Teaching for Elementary Bilingual Students II (Cr/NC) .....  8
ED 970 Teaching Event Assessment ( $\mathrm{Cr} / \mathrm{NC}$ ) ..... 3

## Preliminary 2042 Credential Requirements

1. A bachelor's degree (or higher) with any major other than education.
2. Completion of an approved program of professional education. (See Department of Dual Language and English Learner Education for further information.)
3. Passage of Multiple Subject/CSET.
4. Demonstrated knowledge of principles and provisions of United States Constitution through successful completion of three-unit college level course or examination. Courses are listed in General Catalog section on "Graduation Requirements," IV. American Institutions Requirement.
5. Passage of California Basic Educational Skills Test (CBEST).
6. Passage of Reading Instruction Competence Assessment (RICA) Test.
7. Demonstrated knowledge of the needs of and methods of providing educational opportunities to individuals with exceptional needs: Special Education 450.
8. Demonstrated knowledge of computer hardware, software, and applications to educational/classroom use (computer literacy).
9. Knowledge of health education in California, including substance abuse and nutrition: Teacher Education 280 Health Education for Teachers (1 unit) and verification of CPR competency.
10. Successful completion of a California Teacher Credentialing approved Teacher Performance Assessment (edTPA).
NOTE: Undergraduate students in their final semester prior to obtaining a baccalaureate degree may sign up for concurrent post-baccalaureate credit as explained in the section of this catalog on "Admission and Registration."

According to SB 2042 legislation, teachers will be able to earn Professional Clear Credentials upon successful completion of induction programs sponsored by their employers and approved by the California Commission on Teacher Credentialing.

To be recommended for the bilingual authorization, candidates must meet the language and cultural proficiency requirements.

## Single Subject Bilingual 2042 Credential (Secondary Education Grades 6 through 12): Arabic, Filipino, Japanese, Mandarin, or Spanish Emphasis

## (Credential Code: 00100)

The Single Subject Bilingual 2042 (Secondary Education) Teaching Credential is available for students interested in teaching in a bilingual middle or secondary school classroom. This credential authorizes the holder to teach in any self-contained bilingual or regular classroom in which one teacher is responsible for teaching the given subject area.

Candidates who will pursue this credential need to specify "Single Subject Credential Bilingual" in the application for graduate admission to SDSU (Code: 00100). Directions and links to each application are available at http://go.sdsu.edu/education/admis-sions/preliminary-bilingual-multiple-and-single-subject-credentials.aspx.

## Admissions Information

Applicants who complete their applications on time and meet the standard for admission will be asked to participate in candidate interviews. Applicants should complete application procedures the semester prior to beginning the credential program. Check the department website for current deadline information: http://go.sdsu.edu/education/dle/bilingual_credential.aspx.

## Admission to Dual Language and English Learner Education Department

Complete the online supplemental department application. Directions and links are available at http://go.sdsu.edu/educa-tion/admissions/preliminary-bilingual-multiple-and-single-sub-ject-credentials.aspx. The following materials should be submitted online as part of the department application.

1. Appropriate California Subject Examinations for Teachers (CSET) scores or evidence of an approved waiver program.
2. California Basic Educational Skills Test (CBEST) scores.
3. California Certificate of Clearance.
4. Tuberculin clearance.
5. Two letters of recommendation.
6. Evidence of early field experience. (Credit in DLE 416L can be used to meet this requirement.)
7. Evidence of current CPR training.
8. Autobiography/goals and philosophy.

## Standards for Admission

1. Completion of a bachelor's degree from an accredited institution.
2. CBEST. Students must pass the California Basic Educational Skills Test (CBEST) prior to admission to the Single Subject Bilingual Emphasis credential program. This examination is required by the California Commission on Teacher Credentialing. Registration and test information is available at http://www.cbest.nesinc.com.
3. Subject Matter Competency. Students must verify competency in a specified single subject area through a university assessment process which consists of reviewing coursework for completion of an approved teaching major or its equivalent at San Diego State University or another approved California teacher-training institution or through California Subject Examinations for Teachers (CSET). Competency will be assessed and verified by subject matter departments at SDSU. Requirements for the various single subject majors are listed with the academic majors in the General Catalog. Test scores submitted for verification of subject matter competency are valid for five years from the date of the examination. Information and registration materials are available at http://www.cset.nesinc.com.
4. Prerequisite Courses: The following courses must be completed with a grade of $\mathrm{C}-\mathrm{Cr}$ or better prior to admission to the program but may be in progress at the time of application or taken in the term immediately prior to the program start date.

| DLE 416* | Biliteracy Foundations for Teaching and Learning in Diverse Communities $\qquad$ |
| :---: | :---: |
| AND |  |
| DLE 416L | Biliteracy Foundations for Teaching and Learning in Diverse Communities Field Experience. $\qquad$ $1(\mathrm{Cr} / \mathrm{NC})$ |
| DLE 515** | Theories and Practices in Multilingual Education. .. 3 |
| ED 451 | Introduction to Multicultural Education $\qquad$ .3 |
| SPED 450 | Classroom Adaptations for <br> Special Populations. |
| OR |  |
| SPED 500 | Human Exceptionality ................................... 3 |
| TE 280 | Health Education for Teachers ...................... 1 |

* DLE 416 (formerly numbered DLE 415) may be waived with passage of CSET
LOTE subtests III and V.

** DLE 515 may be waived with passage of CSET LOTE subtest IV.
5. Grade Point Average. Candidates must have a minimum 2.67 overall or 2.75 in the last 60 semester ( 90 quarter) units attempted. Candidates are required to submit official transcripts from all colleges and universities attended and unofficial SDSU transcripts for GPA calculations.
6. Letter of Recommendation. Two letters of recommendation must be submitted attesting to the applicant's following characteristics: (a) attitude, aptitude and ability to teach children; (b) personality and character; (c) academic ability. Letter of recommendation should be from a school teacher with whom the student has worked and the others may be from faculty and administrators.
7. Tuberculin Clearance. Evidence of a negative tuberculosis test (these tests are valid for four years and must be in effect during the time that candidates are enrolled in the credential program) or X-ray showing no active tuberculosis. Clearance statements may be secured from Health Services, private physicians or HMOs , or public health agencies.
8. Early Field Experience. Applicants must provide evidence of a minimum of 30 hours of experience with adolescent students in typical classroom settings within the last five years. Evidence must be documented. Credit in DLE 416L can be used to meet this requirement.
9. Oral English and Written Statement of Professional Goals and Philosophy. Have an interview with the admissions and retention committee of the DLE Department.
10. California Certificate of Clearance. This certificate represents a background clearance and check conducted by the State Department of Justice and Federal Bureau of Investigation. Turnaround time for the clearance can take as long as eight months. Possessors of K-12 California credentials may satisfy this requirement by submitting copies of those certificates. Candidates must submit the application directly to the California Commission on Teacher Credentialing. A copy of the application must be provided to the DLE Department.
11. Credential Advising Appointment. Each applicant must meet with a faculty adviser to plan an appropriate program, which includes a minimum of 31 units as defined by the Commission on Teacher Credentialing. Appointments can be made in EBA-259, 619-594-6320.
12. Demonstration of Language and Cultural Proficiency. All candidates must meet Language Proficiency and Cultural Awareness requirements for the language of emphasis in their specific bilingual authorization.
a. Arabic: Pass CSET LOTE subtests II and V (test codes 193 and 251, respectively) for language of emphasis.
b. Filipino: Pass CSET LOTE subtests II and V (test codes 191 and 255 , respectively) for language of emphasis.
c. Japanese: Pass CSET LOTE subtests III and V (test codes 159 and 260, respectively) for language of emphasis.
d. Mandarin: Pass CSET LOTE subtests III and V (test codes 165 and 253, respectively) for language of emphasis.
e. Spanish: Can be met via coursework or examination.

- Coursework: Complete DLE 416 with an 83 percent on the final examination and a minimum grade of $C$ (2.0).
- Examination: Pass CSET LOTE subtests III and V (test codes 147 and 258, respectively) for Spanish language emphasis.

13. Appeals Process. Candidates who do not meet all the admission requirements may petition the DLE Department Admissions and Retention Committee for individual consideration; petition letters must be submitted concurrently with the application packets.
14. Application. Applicants should complete application procedures the semester prior to beginning the credential program. Call the department for DLE application deadline. In addition to the minimum admissions standards identified above, the DLE Department Admissions and Retention Committee may also consider qualifications such as previous teaching experience and relevant working experience with children. Due to the number of applicants, application to the program does not ensure admission.

## Global Learning Experience Requirement

All candidates in the Dual Language and English Learner Education multiple and single subject programs are required to participate in an organized experience working with students across the border. This requirement consists of two weekends or four days, usually scheduled just before or after the start of the fall semester. Candidates work in small groups to create lesson plans to be implemented in transborder locations such as Tecate or Tijuana, Mexico. This experience will give candidates the opportunity to work with border students in a Mexican school setting, practice lesson planning, and create community among cohort and faculty. Details for the experience, including the registration number for the appropriate section of ED 450 Study Abroad, will be provided upon acceptance to the program. For details, contact the Department of Dual Language and English Learner Education at (619) 594-5155 or dle@sdsu.edu; or the College of Education Global Cultural Experience Coordinator at (619) 594-3266 or coestudyabroad@sdsu.edu.

## Single Subject Bilingual 2042 Program

See Standards of Admission section for prerequisites for this program.

## Credential Courses

## DIE 524

Psychological Foundations for Biliteracy Teachers in Grades 7-12 .............. 1-4
DLE 653 Language Development in K-12 Multilingual Classrooms $\qquad$
DLE 915B Teaching and Learning in the Content Area: English Language Development/ SDAIE: Single Subjects. .. 3
DLE 933
Skills in Teaching Reading to Bilingual Secondary Students..................... 3
DLE 954 Classroom Organization f or Democratic Teaching in Bilingual Classrooms.
DLE 960
Professional Seminar for Bilingual Teacher Candidates. .. 1-4 (Cr/NC)
DLE 963

DLE 964 Practicum in Secondary Bilingual Classroom... $\qquad$ Student Teaching for Bilingual Secondary Students II . $\qquad$
ED 970 Teaching Event Assessment ............. 3 (Cr/NC) TE 914 Teaching and Learning
in the Content Area: Major..

## Preliminary Credential Requirements

1. A bachelor's degree with one of the approved single subject majors listed in the single subject bilingual teaching credential General Catalog section. Credentials can be granted only in the designated single subject credential areas.
2. Completion of an approved program of professional education. (See Department of Dual Language and English Learner Education for further information about the approved programs.)
3. Major Adviser's Recommendation. Passage of subject matter examination(s) or waiver thereof through completion of one of the approved single subject credential majors listed below with a written recommendation from the Ryan major adviser.

Demonstrated subject matter competency through completion of approved waiver program in one of the California single subject areas, is through a combination of coursework and competency examinations, or through CSET examinations. Candidates should check with the College of Education, Office of Student Services, EBA-259, to clarify the appropriate means for satisfaction of the subject matter competency requirement.
4. Successful completion of Language Proficiency and Cultural Awareness requirements for the language of emphasis.
5. Demonstrated knowledge of principles and provisions of United States Constitution through successful completion of three-unit college level course or examination. Courses are listed in General Catalog section on "Graduation Requirements," IV. American Institutions Requirement.
6. Passage of California Basic Educational Skills Test (CBEST).
7. Completion of an approved fifth year program (a minimum of 30 upper division or graduate-level postbaccalaureate units).
8. Demonstrated knowledge of the needs of and methods of providing educational opportunities to individuals with exceptional needs, Special Education 450 or 500.
9. Demonstrated knowledge of computer hardware, software, and applications to educational/classroom use (computer literacy).
10. Knowledge of health education in California, including substance abuse and nutrition: Teacher Education 280 Health Education for Teachers (1 unit) and verification of current CPR competency.
11. Successful completion of a California Teacher Credentialing approved Teacher Performance Assessment (edTPA).
NOTE: Undergraduate students in their final semester prior to obtaining a baccalaureate degree may sign up for concurrent postbaccalaureate credit as explained in the section of this catalog on "Admission and Registration."

According to SB 2042 legislation, teachers will be able to earn Professional Clear Credentials upon successful completion of induction programs sponsored by their employers and approved by the California Commission on Teacher Credentialing.

## Language Requirement for the

## B.A. Degree in Liberal Arts and Sciences

Students electing the study of American Sign Language to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Dual Language and English Learner Education 201 or the equivalent level of achievement. The usual sequence of coursework is Dual Language and English Learner Education 101, 102, and 201. Refer to section of catalog on "Graduation Requirements" for additional ways to satisfy competency.

## High School Equivalents

High school American sign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.
Secondary school language courses can be used as follows:

1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

## Courses (DLE)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

No credit will be given for Dual Language and English Learner Education 101, 102, 201 taken out of sequence.
DLE 101. American Sign Language I (4) [GE]
Three lectures and one hour of discussion.
American Sign Language structure, use, literature, and deaf culture. Introductory level communication competence in ASL. Not open to students with credit in Dual Language and English Learner Education 102 or 201.
DLE 102. American Sign Language II (4) [GE]
Three lectures and one hour of discussion.
Prerequisite: Dual Language and English Learner Education 101. Continuation of Dual Language and English Learner Education 101. Beginning level communication competence in American Sign Language. Not open to students with credit in Dual Language and English Learner Education 201. (Formerly numbered Speech, Language, and Hearing Sciences 102.)
DLE 201. American Sign Language III (4) [GE]
Three lectures and one hour of discussion.
Prerequisite: Dual Language and English Learner Education 102. Continuation of Dual Language and English Learner Education 102. Intermediate level communication competence in American Sign Language. (Formerly numbered Speech, Language, and Hearing Sciences 201.)

## UPPER DIVISION COURSES

(Intended for Undergraduates)
DLE 416. Biliteracy Foundations for Teaching and Learning in Diverse Communities (3)
Prerequisite: Upper division standing.
Oral, written, and communicative competencies in Spanish through practical experiences and study of sociopolitical and sociocultural contexts impacting bilingual learners in culturally and linguistically diverse communities. Maximum credit six units. (Dual Language and English Learner Education 416 and 416L formerly numbered Dual Language and English Learner Education 415.)
DLE 416L. Biliteracy Foundations for Teaching and Learning in Diverse Communities Field Experience (1) $\mathrm{Cr} / \mathrm{NC}$
Two hours of activity.
Prerequisites: Credit or concurrent registration in Dual Language and English Learner Education 416, upper division standing, and working fluency in Spanish.

Field experience in multilingual (Spanish-English) K-12 schools and communities. Maximum credit two units. (Dual Language and English Learner Education 416 and 416L formerly numbered Dual Language and English Learner Education 415.)
DLE 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## DLE 499. Special Study (1-3)

Prerequisite: Consent of instructor. Open only to senior and graduate students in education who have shown ability to work independently.

Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
DLE 515. Multilingual Education: Theory and Practice for Biliteracy Teachers (3)
Pedagogical and programmatic practices for addressing linguistic and academic needs of multilingual learners. Historical and theoretical foundations of bilingual education as related to bilingual and dual language programs to include instruction, curriculum, and assessment. Taught in Spanish and English.

## DLE 523. Psychological Foundations for Biliteracy Teachers in

 K-6 Classrooms (3)Major theories of learning and cognition as applied to bilingual students and their relation to child development, first and second language acquisition, and approaches to teaching in bilingual classroom.

## DLE 524. Psychological Foundations for Biliteracy Teachers in

 Grades 7-12 (1-4)Bilingual learning theory as it affects adolescent growth, individualized instruction, classroom management and discipline, and methods of measuring and evaluating achievement. Taught in Spanish and English. May be repeated with new content. See Class Schedule for specific content. Maximum credit four units.

## DLE 532. Biliteracy Teaching in Language Arts for Elementary

 Students (3)Prerequisite: Dual Language and English Learner Education 416 with a grade of $C(2.0)$ or better. Recommended: Dual Language and English Learner Education 515 with a grade of C (2.0) or better.

Assessing language proficiency; selecting, designing, and evaluating learning experiences to develop biliteracy in K-6 classrooms in English language arts and language of emphasis (Arabic, Mandarin, or Spanish). Taught bilingually in language of emphasis and English.

## DLE 553. Language Assessment and Evaluation in Multicultural

 Settings (3)Theories and methods of assessment and evaluation of diverse student populations including authentic and traditional models. Procedures for identification, placement, and monitoring of linguistically diverse students. Theories, models, and methods for program evaluation, achievement, and decision making.
DLE 596. Special Topics in Bilingual and Multicultural Education (1-3)
Prerequisite: Consent of instructor.
Selected topics in bilingual, cross-cultural education and policy studies. May be repeated with new content. See Class Schedule for specific content. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

OFFICE: Nasatir Hall 329
TELEPHONE: 619-594-1675 / FAX: 619-594-5062
WEBSITE: http://economics.sdsu.edu/

## Faculty

Emeritus: Adler, Boddy, Clement, Frantz, Gerber, Gifford,
Grossbard, Hambleton, Kartman, Leasure, Madhavan, Nam,
Popp, Poroy, Sebold, Steinberg, Stewart, Thayer, Turner, Venieris
Chair: Foad
Professors: Hilmer, C., Hilmer, M., Imazeki, Lee, Sabia, Shadbegian
Associate Professors: Balsdon, Foad, Shahriar
Assistant Professors: Abman, Fe, Liang, Lundberg

## Offered by the Department

Master of arts degree in economics.
Major in economics with the B.A. degree
in liberal arts and sciences.
Emphasis in international economics.
Emphasis in public policy.
Minor in economics.

## The Major

Economics is the science which studies the production, distribution, and consumption of goods and services. Economics majors explore how producers, distributors, and consumers make their decisions. Majors also analyze the events that shape and result from these decisions. Inflation, unemployment, taxation, money and banking, efficiency, international exchange, and growth are some of the many parts of this complex system studied through the economics major at SDSU.

The Department of Economics offers two emphases which students may select to satisfy a wide range of career goals: (1) International Economics, where students can focus on worldwide economic policy and global business; and (2) Public Policy, in which students prepare for graduate study in law school, health administration, and business administration. A specialization in Quantitative Analysis is also offered which focuses on developing analytical and mathematical skills for conducting economic research. A fourth option is the comprehensive program offered in the general economics major, which provides breadth by covering areas from the emphases and specialization.

Economics majors may find employment in government, financial institutions, business, and international agencies. The combination of an economics major with a business minor provides a foundation for a variety of careers. And, students interested in studying the developing nations, the environment, government policies, or population will find that economics is a useful approach.

Many entry-level positions in business and government are available to students with a bachelor's degree in economics. A graduate may find employment as a research, statistical, data, or pricing analyst. There are management trainee positions with banks, savings and loan associations, or other lending institutions. Economics majors may also be employed as sales representatives for firms which produce both "high tech" and consum-er-related goods. A student contemplating graduate study in the field of economics should consider a career as an economics consultant, or as an economist for banks, investment companies or industry.

## Impacted Program

The economics major is an impacted program. To be admitted to the economics major, students must meet the following criteria:
a. Complete with a grade of $C(2.0)$ or better: Economics 101, 102; Economics 201 or Statistics 119 or 250; one course selected from Mathematics 120, 124, or 150; Management Information Systems 180. These courses cannot be taken for credit/no credit (Cr/NC);
b. Have a cumulative GPA of 2.40 or better;
c. To be admitted to the emphasis in international economics (major code 22041), students must, in addition to satisfying the criteria above, also satisfy the language requirement for the Bachelor of Arts degree in Liberal Arts and Sciences;
d. To be admitted to the emphasis in public policy (Major Code: 22041), students must, in addition to satisfying the criteria above, also complete Communication 160 with a grade of $C$ (2.0) or better. Course cannot be taken for credit/no credit (Cr/NC).
To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Economics Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 22041) (SIMS Code: 111901)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in economics courses can apply to the degree.

A minor is not required with this major.
Preparation for the Major. Economics 101, 102; Economics 201 or Statistics 119 or 250 ; one course selected from Mathematics 120, 124, or 150; Management Information Systems 180. (15 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$; except for courses taught as $\mathrm{Cr} / \mathrm{NC}$ only. The minimum grade in each class is $C(2.0)$ or better.

Students completing the California Community College Associate in Arts in Economics for Transfer (AA-T) will satisfy preparation for the major. If Management Information Systems 180 was not completed as part of the AA-T, it must be completed at SDSU.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 27 upper division units to include Economics 301, 320, 321, and 18 units of electives. At least six units of electives selected from the international group: Economics 330,

360, 365, 460, 463, 464, 466, 561, 592. Maximum nine units of Economics 496 or 596; maximum three units of 499; and maximum three units of 495 may be applied to the major. Units of 495, 496, 499, 596 may be counted towards the international group requirement as approved by adviser.

## Emphasis in International Economics <br> (SIMS Code: 111920)

Preparation for the Major. Economics 101, 102; Economics 201 or Statistics 119 or 250; Mathematics 120, 124, or 150; Management Information Systems 180. (15 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$; except for courses taught as $\mathrm{Cr} / \mathrm{NC}$ only. The minimum grade in each class is $C(2.0)$ or better.

Language Requirement. Successful completion of a course in a foreign language at the fourth semester or higher level, that is, one course beyond the B.A. language requirement. Students who have graduated from high school in another country where the language of instruction is not English have met the language requirement for this major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Study/Internship Abroad Requirement. Completion of a study abroad or internship abroad of at least 12 units of coursework or six units of the internship course in another nation. Students may also choose to complete a combination of nine units of study and three units of the internship abroad. Students who have graduated from high school outside the U.S. meet this requirement by studying at SDSU.

Major. A minimum of 33 upper division units (27 units in economics and six to seven units from the Fowler College of Business) to include Economics 301, 320, 321.
a. At least 12 units of electives must be selected from the international group: Economics 330, 360, 365, 460, 463, 464, 466, 561, 592.
b. Up to six units of electives may be selected from Economics 311, 338, 349, 380, 382, 401, 403, 406, 422, 441, 449W, $455,456,485,490$.
c. Six to seven units selected from Business Administration 323 and Finance 329, or Business Administration 350 and Management 357, or Business Administration 370 and Marketing 376.
Maximum nine units of Economics 496 or 596 and maximum three units of 499 may be substituted into groups A or B as appropriate with approval of adviser except for Economics 360, 561, or 592. Maximum three units of 495 may be substituted into group A with appropriate international content as approved by adviser.

## Emphasis in Public Policy

(SIMS Code: 111961)
Preparation for the Major. Economics 101, 102; Economics 201 or Statistics 119 or 250; Mathematics 120, 124, or 150; Communication 160; Management Information Systems 180. (18 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$; except for courses taught as $\mathrm{Cr} / \mathrm{NC}$ only. The minimum grade in each class is $C(2.0)$ or better.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 30 upper division units in economics to include Economics 301, 320, 321, Business Administration 323, and 18 units of electives in economics.
a. At least 12 units selected from the public policy group: Economics 311, 338, 349, 380, 382, 401, 403, 406, 422, 441, 449W, 455, 456, 485, 487, 490.
b. Three units of electives selected from the international group: Economics 330, 360, 365, 460, 463, 464, 466, 561, 592.
c. Three additional units of upper division economics electives.
Maximum nine units of Economics 496 or 596 may be substituted as upper division electives with approval of adviser. Maximum three units of 495 and maximum three units of 499 may be substituted into group A with appropriate policy content as approved by adviser.

## Specialization in Quantitative Analysis

## (SIMS Code: 111970)

Preparation for the Major. Economics 101, 102; Economics 201 or Statistics 119 or 250; Mathematics 150; Management Information Systems 180. (16 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$; except for courses taught as $\mathrm{Cr} / \mathrm{NC}$ only. The minimum grade in each class is $C(2.0)$ or better.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 27 upper division units in economics to include Economics 301, 320, 321, 441, 507, and 12 units of upper division economics electives, with at least six units at the 400 or 500 level. Maximum nine units of Economics 496 or 596 may be substituted as upper division elective with approval of adviser. Maximum three units of 495 and maximum three units of 499 may be substituted as upper division elective with appropriate quantitative content as approved by adviser.

## Economics Minor

(SIMS Code: 111901)
The minor in economics consists of a minimum of 18 units in economics to include Economics 101 and 102, and 320 or 321, and at least nine units of electives selected from one of the following tracks:
International Economics: Economics 330, 360, 365, 460, 463, 464, 466, 561, 592. A maximum of three units of Economics 495,496 , and 499 may be used to satisfy the nine unit elective requirement with prior permission from the department.
Public Policy Economics: Economics 311, 338, 349, 380, 382, 401, 403, 406, 422, 441, 449W, 455, 456, 485, 487, 490. A maximum of three units of Economics 495, 496, and 499 may be used to satisfy the nine unit elective requirement with prior permission from the department.
Quantitative Economics: Economics 301, 441, 507. A maximum of three units of Economics 495, 496, and 499 may be used to satisfy the nine unit elective requirement with prior permission from the department.
Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Courses (ECON)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

ECON 101. Principles of Economics (3) [GE]
Prerequisite: Satisfaction of the SDSU Mathematics/Quantitative Reasoning Assessment requirement.

Principles of economic analysis, economic institutions, and issues of public policy. Emphasis on macroanalysis including national income analysis, money and banking, business cycles, and economic stabilization.
ECON 102. Principles of Economics (3) [GE]
Prerequisite: Satisfaction of the SDSU Mathematics/Quantitative Reasoning Assessment requirement.

Principles of economic analysis, economic institutions, and issues of public policy. Emphasis on direction of production, allocation of resources, and distribution of income, through the price system (microanalysis); and international economics.

## ECON 201. Statistical Methods (3) [GE]

Introduction to descriptive statistics, statistical inference, regression and correlation. Students with credit or concurrent registration in the following lower division statistics courses will be awarded a total of four units for the two (or more) courses: Economics 201; Administration, Rehabilitation and Postsecondary Education 201; Biology 215; Civil Engineering 160; Linguistics 270; Political Science 201; Psychology 280; Sociology 201; Statistics 119 or 250.

## ECON 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

ECON 301. Collection and Use of Data in Economics (3)
Prerequisites: Economics 101 and 102; Economics 201 or Statistics 119; and Management Information Systems 180.

Economic data gathering via Internet and other sources, data entry into spreadsheets and graphing techniques, statistics using spreadsheets, and introduction to basic regression.

## ECON 311. History of Economic Thought (3)

Prerequisites: Economics 101 and 102.
The development of economics. Contributions of schools of thought and individual writers are examined with regard to their influence on economic theory and policy.
ECON 320. Intermediate Macroeconomic Theory (3)
Prerequisites: Economics 101 with approval of department. Recommended: Mathematics 120 or 124 or 150.

Determination of output, income, unemployment, and inflation. Policies for economic stabilization and growth in an open economy.
ECON 321. Intermediate Microeconomic Theory (3)
Prerequisite: Economics 102 with approval of department. Recommended: Mathematics 120 or 124 or 150.

Behavior of consumers, firms and industries with respect to product and input markets. Price system and other models of economic decision making. Economic efficiency and welfare; property rights and externalities.

## ECON 330. Comparative Economic Systems (3) [GE]

Prerequisites: Six units of economics to include Economics 102.
Current economic systems from primarily laissez-faire to state-controlled market economies with a focus on nations of Asia, Europe and Latin America; Soviet-style economic planning and transition to a market economy.
ECON 338. Economic History of the United States (3)
Prerequisite: Six units of economics to include Economics 101.
American economic development and national legislation. Studies of agriculture, industry, the labor force, and national output.

## ECON 349. Economics for Teachers (3)

Prerequisites: Economics 101 and 102.
Micro and macroeconomics with emphasis on developing economic literacy and economic way of thinking.
ECON 360. International Economic Problems (3)
Prerequisites: Economics 101 and 102.
International problems, economic communities, organizations, and other selected topics.
ECON 365. Economics of Underdeveloped Areas (3)
Prerequisite: Six units of economics to include Economics 101.
The nature and causes of economic underdevelopment. Problems of and policies for the economic development of underdeveloped areas of the world.

## ECON 380. Labor Economics (3)

Prerequisite: Economics 321.
Labor force and mobility, human capital, labor demand, discrimination, determination of compensation and employment, productivity, impact of labor organizations, labor disputes, and social legislation.

## ECON 381. Economics of Immigration (3)

Prerequisites: Economics 101 and 321.
Examination and history of immigration policy in the United States and its intended and unintended consequences. Debates over economic assimilation, immigration policy, impact of native labor market, and perceptions about immigrants and the welfare system.

## ECON 382. Economics of Work, Marriage, and Family (3)

Prerequisite: Economics 102.
Economic analysis of marriage and labor supply; family-related changes in work behavior; gender differences in occupations and earnings; welfare, work and family policies in the U.S. and internationally; macroeconomic analysis of household structure and economy.

## ECON 401. Public Finance (3)

Prerequisites: Economics 101 and 102.
Principles and practices of taxation and public expenditures. Economic effects of public spending, debts and taxation. Financing social security and other services. Fiscal policy and prosperity. Relation to inflation and deflation. Special emphasis on social problems involved.

## ECON 403. Health Economics (3)

Prerequisites: Economics 101 and 102; Economics 201 or Statistics 119 or 250; Mathematics 120, 124, or 150.

Apply economic principles and statistical techniques to production of health and delivery of health services. Business structures of delivery systems and incentives for providers and patients. Compare international health insurance systems, examine U.S. reforms.

## ECON 406. Economics of Sports (3)

Prerequisite: Economics 102.
Economic issues in professional and college team sports. Emphasis on monopoly and monopsony behavior by sports leagues and teams, public subsidies for sports facilities, ticket pricing, and NCAA rules and regulations.

## ECON 422. Business Cycles (3)

Prerequisites: Economics 101 and 102.
Fundamental factors in economic fluctuations. Examination of business cycle theories, and various policy proposals for economic stabilization. A consideration of current economic conditions and an examination of methods employed in preparing national economic forecasts.

## ECON 441. Introduction to Econometrics (3)

Prerequisites: Economics 301; Mathematics 120 or 124 or 150; Recommended: Economics 320 or 321.

Econometric techniques with emphasis on single-equation models. Applied skills learned through computer assignments.

## ECON 449W. Economic Literacy (3)

Prerequisites: Twelve units in economics to include Economics 101 and 102. Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a grade of $C(2.0)$ or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281], if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Economic way of thinking through writing. Effective communication of economic concepts and analysis to different audiences.

## ECON 455. Environmental Economics (3)

Prerequisite: Economics 102.
Relation of environmental amenities and pollution to economic behavior and institutions. Environmental problems in externalities, public goods, and common-property resources. Environmental policy from perspective of public economics: regulation, benefit-cost analysis, valuation of non-market goods.
ECON 456. Economics of Natural Resources (3)
Prerequisite: Economics 102.
Examination of efficient extraction and use of natural resources from an economic perspective. Fundamental and practical differences between renewable and nonrenewable resources. Fossil fuel extraction, mining, renewable energy, forestry, fisheries, and conservation policy.
ECON 460. Economics of Financial Crises (3)
Prerequisites: Economics 101 and 102.
Economic theories of crises and economic histories in qualitative and quantitative perspective to include recent crises in US and Europe. Empirical analysis of variety, frequency, and consequences. Policies for ending crises.

## ECON 463. Economic Development Before 1900 (3)

Prerequisites: Economics 101 and 102.
Emergence of market institutions in medieval Europe; comparisons with China, India, and Islamic world. Origin and evolution of market institutions, using concepts from new institutional economics, game theory, and behavioral economics.
ECON 464. Economic Problems of Latin America (3) [GE]
Prerequisites: Six units of economics to include Economics 101.
Economic development, institutions, and problems of Latin America in the context of a global economy.
ECON 466. Economics of the Middle East (3)
Prerequisites: Economics 101 and 102.
Theories and practices of economic development in the Middle East to include economic history, colonial legacies, natural resource curse, migration, state capitalism, and economics of conflict.

## ECON 485. Law and Economics (3)

Prerequisite: Economics 102.
Impact of legal rules on implicit prices for consumer and firm behavior, distribution of resources, economic efficiency. Background on laws surrounding property, contracts, torts, the judicial process, and crime, with focus on effects of laws on consumers and producers.

## ECON 487. Economics of Strategy (3)

Prerequisites: Economics 321 and Mathematics 120 or 124 or 150.
Game theory and analysis of strategic decision-making. Non-cooperative games in the context of business, bargaining among agents, political decision-making, voting, etc.

## ECON 490. Money and Banking (3)

Prerequisites: Economics 101, 102, and Accountancy 201.
Money's measurement and use; monetary theory and policy; returns on financial instruments; international payments and foreign exchange; evolution of banking institutions, and global competition.

ECON 495. Economics Internship (3) Cr/NC/RP
Prerequisite: Consent of instructor.
Internship with business firms, nonprofit organizations and government agencies. Work done under joint direction of activity supervisor and instructor. Project report and internship conferences required. Maximum credit six units.

## ECON 496. Experimental Topics (1-3)

Prerequisite: Consent of instructor.
Selected topics in economics. May be repeated with approval of the instructor. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Maximum credit nine units.

## ECON 499. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. May be repeated for a maximum of six units. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
ECON 507. Mathematical Economics (3)
Prerequisite: Mathematics 124 or 150. Recommended: Economics 320 or 321.

Mathematical concepts as tools in understanding, developing, and illustrating economic theories. Applications of calculus and linear equations to constrained optimization, macro models, elasticity, general equilibrium, and input-output analysis.

## ECON 561. International Trade (3)

Prerequisites: Economics 320 and 321.
Theory and policy of international trade with examples drawn from current issues. Models of determinants of trade. Free trade and protectionism. Trade and economic development. Trading blocs, the European community, GATT and U.S. trade policy.
ECON 592. International Monetary Theory and Policy (3)
Prerequisite: Economics 320 or 490.
International monetary spillovers from domestic macroeconomic policies. Foreign exchange markets and balance of payments. Fixed, flexible and managed exchange rates. Bretton Woods, international monetary fund, and world debt crisis.

## ECON 596. Experimental Topics (3)

Prerequisite: Consent of instructor.
Intensive study in specific areas of economics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of nine units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES <br> Refer to the Graduate Bulletin.

OFFICE: Education and Business Administration 346
TELEPHONE: 619-594-6091 / FAX: 619-594-7082
Accredited by the California Commission on Teacher Credentialing and the National Council for Accreditation of Teacher Education.

## Faculty

Faculty assigned to teach in education are drawn from departments in the College of Education.

## Cultural Proficiency Minor

(Minor Code: 08131) (SIMS Code: 332002)
The minor in cultural proficiency consists of a minimum of 15 units to include Education 409, Counseling and School Psychology 401, and General Studies 203. Six additional units selected from the following (or others with approval of the adviser): Education 484; Africana Studies 327, 331, 332, 341, 351 [or Religious Studies 351], 363 [or Linguistics 363]; American Indian Studies 320, 420, 451 [or Anthropology 451]; Anthropology 439; Asian Studies 300, 421 [or History 421], 422 [or History 422], 460 [or Filipino 460]; Chicana and Chicano Studies 320, 350A-350B, 376, 380 [or Latin American Studies 380]; Communication 371; Counseling and School Psychology 300, 420; Dual Language and English Learner Education 416, 515; Lesbian, Gay, Bisexual, and Transgender Studies 321, 322 [or Humanities 322]; Women's Studies $320,325,331,336,340$.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Courses (ED)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

ED 200. Teaching as a Profession (3)
Current issues, challenges in education; explores strategies that promote professional development. Critically assesses issues related to teaching in culturally and linguistically diverse school settings. Includes guided classroom observations.

## ED 201. Introduction to Literacy (3)

Two lectures and four hours of laboratory.
Intended for students in the liberal studies blended program for K-3 literary tutors. Basic processes of literacy and instructional strategies in culturally relevant reading instruction for emergent readers. Requires four hours weekly tutoring in a designated K-3 setting.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

## ED 350. Education in American Society (3) [GE]

Philosophical, historical and psychological roots of education in America; current models, instructional designs and strategies of education. Contemporary concerns in education.

## ED 409. Cultural Competency (3)

Prerequisite: General Studies 203 with a grade of $C$ (2.0) or better.

Application for a democratic and pluralistic society to include critical thinking, multicultural awareness, and social issues. Beliefs and attitudes on cultural issues and identity.

## ED 450. Study Abroad (1-3)

Prerequisite: Upper division standing.
Study abroad in Education. See Class Schedule for specific content and geographic location. May be repeated with new content and approval of major adviser for a maximum of three units applicable to a bachelor's degree.
ED 451. Introduction to Multicultural Education (3)
Overview of cultural pluralism in education, industry, business, other institutions, and society at large.

## ED 484. Valuing Human Diversity (3) [GE]

Human diversity that enriches societies. Race, gender, language, and spirituality. Impediments to valuing human diversity; classism, sexism, racism, and anti-Semitism. Not open to students with credit in Teacher Education 284.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

## Educational Leadership

In the College of Education

OFFICE: North Education 166
TELEPHONE: 619-594-4063
E-MAIL: edl@sdsu.edu
WEBSITE: http://go.sdsu.edu/education/edl/
Accredited by the California Commission on Teacher Credentialing and the National Council for Accreditation of Teacher Education.

## Faculty

Emeritus: Basom, Chance, Cohn, Downey, James-Ward, Latta, Meno, Merino, Pumpian, Streshly, Uline, Warburton, Yerkes
Chair: Fisher
Professors: Fisher, Frey, Johnson
Associate Professor: Marshall
Assistant Professors: Park, Wright
Offered by the Department
Doctor of Education degree in educational leadership. Concentration in PreK-12 educational leadership.
Master of Arts degree in education.
Concentration in educational leadership: Specialization in PreK-12.
Administrative services credential (refer to the Graduate Bulletin).

Courses (EDL)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
EDL 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## EDL 499. Special Study (1-3)

Prerequisites: Consent of instructor. Open only to senior and graduate students in education who have shown ability to work independently.

Individual study. Maximum credit six units.

## UPPER DIVISION COURSE

(Also Acceptable for Advanced Degrees)
EDL 596. Topics in Educational Leadership (1-3)
Selected problems in educational leadership. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

## Educational Technology

Refer to "Learning Design and Technology" in this section of the catalog.

# Electrical Engineering <br> In the College of Engineering 

OFFICE: Engineering 426
TELEPHONE: 619-594-7013
WEBSITE: http://electrical.sdsu.edu
The undergraduate degree in Electrical Engineering is accredited by the Engineering Accreditation Commission (EAC) of ABET, http://www.abet.org.

## Faculty

Emeritus: Abut, Bailey, Betancourt, Chang, harris, f., Harris, J., losupovici, Kolen, Lee, G., Lee, L., Lin, Marino, Massey, Panos, Skaar, Stuart, Szeto, Thyagarajan, Tummala

## Chair: Mi

The Radio Frequency Communication Systems Industry Chair: Gupta
Professors: Engin, Gupta, Kumar, Ozturk, Sarkar, Sharma
Associate Professors: Alimohammad, Ashrafi, Nagaraj, Seshagiri
Assistant Professors: Aksanli, Dehghan Manshadi, Huang,
Nguyen, Paolini, Sabzehgar, Teh, Töreyin, Xie

## Offered by the Department of Electrical and Computer Engineering

Doctor of Philosophy degree in engineering sciences: (bioengineering), (electrical and computer engineering), (mechanical and aerospace engineering), (structural engineering).
Master of Engineering.
Master of Science degree in electrical engineering. Major in computer engineering with the B.S. degree. Major in electrical engineering with the B.S. degree.
Certificate in rehabilitation technology (refer to the Graduate Bulletin).

## The Radio Frequency Communication Systems Industry Chair

The Radio Frequency (RF) Communications Systems Industry Chair was established in recognition of the pervasiveness and vital role of radio frequency and wireless communications in modern society, and the emergence of San Diego as the world's leading center of research and development in the field of telecommunications and wireless engineering. The chair is sustained through generous contributions of Cubic Corporation and other corporations engaged in wireless communication technology, in appreciation of contributions of students trained in the field at SDSU. The RF Communications Systems Industry Chair is intended to promote excellence in education of RF and microwave engineers, and encourage significant professional activities in the field. Dr. Madhu S. Gupta, the first occupant of the chair, maintains a major involvement in professional work in the discipline and has received international recognition from his professional peers as a distinguished educator and scholar in the field of RF and microwave engineering.

## Transfer Credit

No credit will be given for upper division engineering coursework taken at an institution having an engineering program which has not been accredited by the Engineering Accreditation Commission (EAC) of ABET, unless the student successfully completes the first 12 units of engineering work attempted at this university. At that time, and upon recommendation of the department, credit will be given for the unaccredited work.

## The Major

The field of Electrical Engineering involves three major activities: the generation and distribution of electric power; the collection, processing and communication of information; and the study and application of electromagnetic phenomena and materials.

The electric power industry is the oldest area of Electrical Engineering, but it remains an active area of innovation and development, as well as a major employer. Activities in the power area include the design of machines for energy conversion (motors and generators); the design of DC power supplies and other electronic circuits for the efficient delivery of electric power from various sources (e.g., solar cells, batteries, AC generators); and the design and operation of systems for the distribution of electric power, including the power grid that cover the United States with links to grids of other countries.
The most dynamic area of Electrical Engineering today is the processing and communication of information. Activities in this area include the design of machines that store, process and display information; and the design of systems for communicating information (e.g., radios, telephones, fax machines, cellular phones, computer networks, the world wide web, satellite communication systems, cable television systems, etc.). Also included in this area are consumer electronics and instrumentation for applications of all sorts (e.g., medical equipment, industrial process control, machine control, bio-engineering, traffic control, radar, sonar, speech analysis and synthesis, music, etc.).
The study of electromagnetic phenomena and materials provides the foundation for all of Electrical Engineering. Research and development at this level typically leads to new developments and improvements in other areas. Major activities today include the study of energy conversion processes, fabrication processes, imaging techniques, information storage mechanisms, environmental processes, and optoelectronics (e.g., lasers, optical fibers, optical computing).

The Bachelor of Science degree program includes a core of courses that provides an introduction to each of the major areas described above. In addition, nearly a full year of professional electives provides the opportunity for students to specialize in areas of particular interest. The process of engineering design is emphasized throughout the curriculum by including open-ended problems with realistic design constraints. The design experience culminates in a capstone design course required of all students. Creativity, consideration of economic and social factors, and the application of systematic design procedures are used to solve problems that confront engineers. The curriculum attempts to achieve a balance between theory and practice that will prepare graduates both for immediate employment and for continued study. The Master of Science program offers graduates in electrical engineering and related fields the opportunity for continued study and further specialization.
Employment opportunities within the electrical engineering profession are challenging and usually plentiful. Electrical engineering graduates are sought by a wide range of employers in government and industry for many different types of work including design, testing, production, maintenance, system operation, programming, customer support engineering, and technical marketing and sales. Graduates have the opportunity to contribute to society by helping to design and supply the high-quality products and services that are necessary for a robust economy.

## Retention Policy

The engineering program expects all majors will make reasonable academic progress toward the degree. Engineering premajors who have either (1) completed major preparatory courses, earned 60 units, but have less than a 2.7 cumulative GPA or (2) earned 60 units but have not completed major preparatory courses and/or have less than a 2.7 cumulative GPA may be removed from the premajor and placed in undeclared.

## Program Educational Objectives

The overall objective of the undergraduate program in electrical engineering is to produce the best skilled, hands on practicing electrical engineer. More specifically the objectives are:
A. To provide students with the technical knowledge and skills that will enable them to have a successful career in the electrical engineering profession;
B. To provide students with a general education that will enable them to appreciate the social, ethical, economic, and environmental dimensions of problems they may face;
C. To develop in students the communication skills and social skills that are necessary to work effectively with others;
D. To develop the ability of students to solve problems by learning what is already known, and then applying logic and creativity to find a solution;
E. To provide students with the intellectual skills necessary to continue learning and to stay current with the profession as it changes.

## Impacted Program

The electrical engineering major is an impacted program. To be admitted to the electrical engineering major, students must meet the following criteria:
a. Complete with a grade of $C(2.0)$ or better: Electrical Engineering 210; Computer Engineering 160; Mathematics 150, 151; Physics 195, 196. These courses cannot be taken for credit/no credit (Cr/NC);
b. Have an overall cumulative GPA of 2.7.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Electrical Engineering Major

With the B.S. Degree

## (Major Code: 09091) (SIMS Code: 443001)

This program requires 133 units to include general education. In addition, the total number of units specified in each elective category represents a minimum requirement. These are Upper Division Engineering Elective, Professional Electives, and Electrical Engineering Laboratory Electives.

Preparation for the Major. Electrical Engineering 210; Aerospace Engineering 280; Biology 100 or 101; Computer Engineering 160, 270, 271; Mathematics 150, 151, 252, 254; Physics 195, 195L, 196, 196L. (41 units)

Electrical Engineering 210; Computer Engineering 160; Mathematics 150, 151; Physics 195, 196 must be completed with a grade of $\mathbf{C}$ (2.0) or better. Aerospace Engineering 280; Computer Engineering 271; Mathematics 252, 254 must be completed with a grade C- (1.7) or better. These courses cannot be taken for credit/ no credit ( $\mathrm{Cr} / \mathrm{NC}$ ).

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 53 upper division units to include the following required and professional elective courses. Required upper division courses in the major: Electrical Engineering 300, $310,330,330 \mathrm{~L}, 340,380,410,420,430,440,450,490$; Computer Engineering 375. Professional electives: Twelve units selected from upper division electrical engineering courses and no more than three units from approved upper division courses from other departments. Electrical Engineering laboratory electives: Three units selected from any non-required upper division electrical engineering laboratory courses.

Master Plan. The master plan provides an advising record for electrical engineering majors and should be initiated by the student with their faculty adviser during the first semester of the junior year. All students must have a master plan on file in the department prior to enrollment in Electrical Engineering 410. Changes to the master plan are permitted with the approval of the faculty adviser and the department chair.

## Courses (EE)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

NOTE: Prerequisites will be enforced in all undergraduate electrical engineering courses numbered 100 through 596. A copy of an official transcript will be accepted as proof. For corequisites, an enrollment confirmation form will be accepted.

## LOWER DIVISION COURSES

E E 204. Principles of Electrical Engineering (3)
Prerequisites: Mathematics 151 and Physics 196 with a grade of $C$ (2.0) or better in each course.

Circuit analysis, phasor diagrams, single-phase and three-phase power, semiconductor devices and applications, and energy conversion devices. Not acceptable for electrical or computer engineering majors.

## E E 210. Circuit Analysis I (3)

Prerequisites: Mathematics 151 and Physics 196 with a grade of $C$ (2.0) or better in each course.

Circuit analysis by reduction methods, Thevinin and Norton's equivalence, mesh current and nodal voltage analysis. Transient analysis of first-order circuits and use of phasors for steady-state sinusoidal analysis. Operational amplifier models, impedance, power. Computer software tools for circuit analysis.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
E E 300. Computational and Statistical Methods for Electrical Engineers (3)
Prerequisite: Electrical Engineering 210 with a grade of $C$ (2.0) or better.

Random signals and events in electrical engineering. Introduction to basic probability, discrete and continuous random variables, joint random variables. Application of probabilistic models and concepts to engineering; data analysis and point estimation using computer-aided engineering tools.

## E E 310. Circuit Analysis II (3)

Prerequisites: Electrical Engineering 210 with a grade of C (2.0) or better. Mathematics 252 or both Aerospace Engineering 280 and Mathematics 254 with a grade of C- (1.7) or better.

Transient and frequency response of RLC circuits. Mutual inductance, network analysis using Laplace transformations, network functions, stability, convolution integrals, Bode diagrams, two-port networks, computer analysis of circuits.

## E E 330. Fundamentals of Engineering Electronics (3)

Prerequisite: Electrical Engineering 210 with a grade of $C$ (2.0) or better.

Application of diodes JFETs, MOSFETs, and BJTs in typical electronic circuits. Analysis and design of rectifiers, filters, and simple amplifiers using transistors and operational amplifiers.

## E E 330L. Engineering Electronics Laboratory (1)

Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Electrical Engineering 330 with a grade of C - (1.7) or better.

Experimental study of laboratory instruments, diodes, rectifier circuits, filters, transistors, and operational amplifiers.
E E 340. Electric and Magnetic Fields (3)
Prerequisites: Electrical Engineering 210 with a grade of C (2.0) or better. Aerospace Engineering 280 and Mathematics 252 with a grade of C - (1.7) or better in each course.

Electrostatic and magnetostatic field theory using vector notation; Coulomb's Law, Gauss' Law and potential theory. Solutions to Poisson's and Laplace's equations; capacitance and inductance.

## E E 380. Electrical Energy Conversion (3)

Prerequisite: Electrical Engineering 210 with a grade of $C$ (2.0) or better.

Magnetic circuits, transformers and polyphase AC networks. Fundamentals of electro-mechanical energy conversion; induction motors, synchronous machines and DC machines.

## E E 380L. Electrical Energy Conversion Laboratory (1)

Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Electrical Engineering 380 with a grade of C - (1.7) or better.

Experimental study of DC, single and polyphase AC circuits, transformers, and machines.

## E E 397. Discussion: Electrical Engineering (1) $\mathrm{Cr} / \mathrm{NC}$

Prerequisite: Concurrent registration in associated course.
Discussion and examples of problem-solving techniques in subject area. Weekly writing assignments summarizing material covered in lecture and identifying troublesome topics. Not applicable to a bachelor's degree.

## E E 410. Signals and Systems (3)

Prerequisites: Electrical Engineering 300 and 310 with a grade of C- (1.7) or better in each course. File an approved master plan with the Department of Electrical and Computer Engineering.

Linear time-invariant systems, Fourier analysis, continuous and discrete signals and systems, sampling and Laplace transform techniques.

## E E 420. Feedback Control Systems (3)

Prerequisite: Electrical Engineering 410.
Control systems including servomechanisms by Laplace transform method. System performance and stability; Nyquist, Bode, and root-locus diagrams; elementary synthesis techniques. Practical components and examples of typical designs.

## E E 420L. Control Systems Laboratory (1)

Three hours of laboratory.
Prerequisite: Electrical Engineering 420.
Analog (op-amp based) and digital (microcontroller) implementation. Design of control systems to include lag, lead, optimal PID and LQR controller design, system identification. Use of sensors and actuators.

## E E 430. Analysis and Design of Electronic Circuits (3)

Prerequisites: Electrical Engineering 310, 330, and Aerospace Engineering 280 with a grade of C- (1.7) or better in each course.

Single and multiple transistor amplifiers, power stages. Frequency response, feedback, stability, and operational amplifier circuits.

## E E 430L. Electronic Circuits Laboratory (1)

Three hours of laboratory.
Prerequisites: Electrical Engineering 330L and 430.
Design and evaluation of active filters and tuned amplifiers, current mirrors, feedback circuits, single-stage and multistage amplifiers, voltage regulators. Advanced uses of laboratory test equipment.

## E E 434. Electronic Materials and Devices (3)

Prerequisites: Electrical Engineering 330 and 340 with a grade of $C$ - (1.7) or better in each course.

Crystal properties and growth of semiconductors, quantum mechanics of solids, shot noise and thermal noise, energy band and charge carriers, excess carrier in semiconductors, p-n junctions, solar cells, tunnel diodes, photodetectors.

## E E 439. Instrumentation Circuits (3)

Prerequisite: Credit or concurrent registration in Electrical Engineering 430.

Design and analysis of mixed signal, analog/digital, electronic systems. Emphasis on operational amplifier based circuit design with design procedures needed to accommodate amplifier limitations in real world applications. Introduction to digitally controlled, analog signal processing.

## E E 440. Electromagnetic Waves (3)

Prerequisites: Electrical Engineering 310 and 340 with a grade of C- (1.7) or better in each course.

Time-domain form of Maxwell equations, electromagnetic wave propagation in unbound media, Poynting vector, reflection of plane waves, transmission line theory, Smith chart, different microwave transmission lines, wave propagation in bounded media, waveguides, and introduction to antennas.

## E E 450. Digital Signal Processing (3)

Prerequisite: Electrical Engineering 410.
Discrete-time signals and systems, Sampling, Z-transform, Dis-crete-time Fourier transform and frequency responses, DFT, FFT, and introduction to IIR and FIR digital filter design. (Formerly numbered Electrical Engineering 556.)

## E E 455. Antenna Theory and Design (3)

Prerequisite: Electrical Engineering 440.
Wireless communication system. Fundamental antenna parameters, theory and design of different types of antennas (wire, aperture, broadband, array), and techniques for antenna analysis, fabrication and measurement.

## E E 458. Analog and Pulse Communication Systems (3)

Prerequisite: Electrical Engineering 410.
Analog and digital communication systems. Amplitude and frequency modulation, pulse modulation, and PCM. Introduction to information theory.

## E E 458L. Communications and Digital Signal Processing Laboratory (1)

Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Electrical Engineering 458.

Experiments in modulation techniques, effects of noise on system performance, digital filters, and signal processing. (Formerly numbered Electrical Engineering 558L.)

## E E 480. Power System Analysis (3)

Prerequisites: Aerospace Engineering 280, Electrical Engineering 310 and 380 with a grade of C - (1.7) or better in each course.

Modern power system elements; calculation of load flow, fault currents, and system stability.
E E 483. Power Distribution Systems (3)
Prerequisite: Electrical Engineering 380 with a grade of C- (1.7) or better.

Design and operation of electric power distribution systems. Design of primary and secondary systems, application of one phase and three phase transformer banks, and metering principles and practices.

## E E 490. Senior Design Project (4)

Two lectures and six hours of laboratory.
Prerequisites: Computer Engineering 375 and Electrical Engineering 330 L with a grade of C - (1.7) or better in each course. Electrical Engineering 410 and 430.
Supervised capstone design projects to provide integrative design experience for seniors to include ethics, professionalism, cost-effectiveness, and project management.

## E E 495. Internship (1) Cr/NC

Prerequisites: Completion of 96 units towards the electrical engineering major with a GPA of 3.0 or better.

Internship or practicum experience. Not applicable to a major in the department of Electrical and Computer Engineering. Maximum credit three units.
E E 496. Advanced Electrical Engineering Topics (1-3)
Prerequisite: Consent of instructor.
Modern developments in electrical engineering. See Class Schedule for specific content. Maximum credit nine units for any combination of Electrical Engineering 496 and 596 applicable to a bachelor's degree.

## E E 499. Special Study (1-3)

Prerequisites: Approval of project adviser and department chair. Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)

## E E 502. Electronic Devices for Rehabilitation (3)

Two lectures and three hours of laboratory.
Prerequisite: Electrical Engineering 330 with a grade of C- (1.7) or better.
Recent developments in electronic assistive devices and microcomputers for persons with various disabilities; assessment of disabled persons for suitable technological assistive devices.

## E E 503. Biomedical Instrumentation (3)

Prerequisites: Aerospace Engineering 280 with a grade of C(1.7) or better; Electrical Engineering 410 and 430 (or for Mechanical Engineering majors, Electrical Engineering 204 and Mechanical Engineering 330).
Instrumentation systems to monitor, image, control, and record physiological functions.

## E E 522. Digital Control Systems (3)

Prerequisite: Electrical Engineering 420.
Digital controls systems; design algorithms including analoginvariance methods, direct digital techniques, and non-parametric approaches such as fuzzy control, neural networks, and evolutionary systems; implementation considerations.

## E E 530. Analog Integrated Circuit Design (3)

Prerequisite: Electrical Engineering 430 with minimum grade of C-

Advanced treatment of transistor pairs, device mismatches, differential amplifiers, current mirrors, active loads, level shifting, and output stages. Parasitic and distributed device parameters. Economics of IC fabrication and impact on design.

## E E 540. Microwave Devices and Systems (3)

Prerequisite: Electrical Engineering 440. Recommended: Aerospace Engineering 515.
Applications of Maxwell's equations to wave propagation. Microwave network parameters; guided wave transmission and reflection. Design of filters, couplers, power dividers and amplifiers. Applications in radar and telecommunications systems.

## E E 540L. Microwave Design and Measurements Laboratory (1)

Three hours of laboratory.
Prerequisites: Credit or concurrent registration in Electrical Engineering 430 L and 540.

Microwave measurement equipment, simulation tools for designing microwave components, vector network analyzer calibration, design and measurement of planar microwave components, and a design project.

## E E 558. Digital Communications (3)

Prerequisite: Electrical Engineering 458.
Design of baseband digital communication systems; noise characterization, sampling, quantization, matched filter receivers, bit-error performance, inter-symbol interference, link budget analysis.

## E E 581. Power System Dynamics (3)

Prerequisite: Electrical Engineering 480.
Three-phase faults, symmetrical components, unsymmetrical faults, protective relay operating principles, economic dispatch of thermal power generation units, power system controls, voltage and power stability.

## E E 584. Power Electronics (3)

Prerequisites: Electrical Engineering 380 and 430 with a grade of C- (1.7) or better in each course.

Design and analysis of power electronic devices. Perma-nent-magnet and pulse-width modulation ac-to-ac converters, dc-to-ac inverters, power electronics applications, power semiconductor switches, and switch-mode power supplies. (Formerly numbered Electrical Engineering 484.)

## E E 584L. Power Electronics Laboratory (3)

Prerequisite: Credit or concurrent registration in Electrical Engineering 584.

Experimental design of dc-dc converters (boost, buck, buckboost), flyback and forward converters, voltage and current mode control design and implementation. Basic photovoltaics and maxi-mum-power-point-tracking (MPPT) design and battery charge control using switched-mode dc-dc converters.

## E E 596. Advanced Electrical Engineering Topics (1-3)

Prerequisite: Consent of instructor.
Modern developments in electrical engineering. May be repeated with new content. See Class Schedule for specific content. Maximum credit of nine units for any combination of Electrical Engineering 496 and 596 applicable to a bachelor's degree. Maximum combined credit of six units of Electrical Engineering 596 and 696 applicable to a 30 -unit master's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

## Engineering

OFFICE: Engineering 203
TELEPHONE: 619-594-6061
E-MAIL: info@engineering.sdsu.edu
WEBSITE: http://www.engineering.sdsu.edu/
The College of Engineering undergraduate programs in aerospace, civil, computer, construction, electrical, environmental, and mechanical engineering are accredited by the Engineering Accreditation Commission (EAC) of ABET, http://www.abet.org.

## Faculty

Faculty assigned to teach courses in engineering are drawn from departments in the College of Engineering.

## Engineering Minor

(Minor Code: 09011) (SIMS Code: 444001)
The minor in engineering consists of 15 units in engineering, 12 units of which must be in upper division courses. The courses must be approved by the assistant dean of the College of Engineering. The engineering minor is not available to students majoring in engineering.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Courses (ENGR)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

ENGR 250. Introduction to Renewable Energy (3) [GE] (Offered only at SDSU-IV)
Prerequisites: Mathematics 150 with a grade of $C$ (2.0) or better or satisfaction of the SDSU Mathematics/Quantitative Reasoning Assessment requirement and qualification on the Mathematics Placement Assessment. Proof of completion of prerequisites required.

Energy sources and systems. Future challenges and trends of energy use. Incentives and policies on energy resources. Laws of thermodynamics and factors impacting economic viability of power generation.

## ENGR 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## UPPER DIVISION COURSE

(Intended for Undergraduates)

## ENGR 496. Advanced Engineering Topics (1-3)

Prerequisite: Minimum grade point average of 2.0 in engineering.
Modern developments in engineering. See Class Schedule for specific content. Maximum credit six units for any combination of 496,499 , and 596 applicable to a bachelor's degree.

GRADUATE COURSES
Refer to the Graduate Bulletin.

## English

In the College of Arts and Letters

OFFICE: Arts and Letters 226
TELEPHONE: 619-594-5307 / FAX: 619-594-4998
E-MAIL: EandCL@sdsu.edu
WEBSITE: http:///literature.sdsu.edu
Faculty
Emeritus: Adams, Allison, Benson, Boe, Brashear, Bumpus, Butler, Chin, Davis, Farber, Gervais, Gregory, Griswold, Jaffe, Kehler, Koolish, Matlin, McCaffery, McLeod, Monteverde, Nelson, Neumeyer, Polkinhorn, Redding, M., Redding, R., Rogers, Rother, Savvas, Scott, Sheres, Shojai, Vanderbilt, Wall, Widmer

## Chair: Serrato

Professors: Alcosser, Brooks, Champion, Edson, Herman, Hicks, Martin, Nericcio, Shumaker (SDSU-IV), Thomas
Associate Professors: Bailey, Borgstrom, Colquitt, Howard,
Pressman-Lupien, Serrato, Stampfl (SDSU-IV)
Assistant Professors: Chetty, Leong, Matos
Offered by the Department of English and Comparative Literature
Master of Arts degree in English.
Master of Fine Arts degree in creative writing.
Major in English with the B.A. degree in
liberal arts and sciences OR applied arts and sciences.
Major in English in preparation for the single subject teaching credential in English language arts.
English honors.
Minor in English.
Minor in children's literature.
Minor in creative editing and publishing.
Minor in creative writing.
Certificate in children's/adolescent literature, advanced
(refer to the Graduate Bulletin).
Certificate in children's literature.
Certificate in creative editing and publishing.
Certificate in creative writing.

## The Major

The study of English today encompasses a wide range of materials and approaches to ways in which both students and established writers - past and present - may use language to express feelings, convey ideas, and give aesthetic pleasure. As one of the largest English departments in California, SDSU's can offer not only historical, analytical, sociopolitical and other approaches to literature and literary theory, but a variety of creative and expository writing classes as well.

English majors take 15 units of lower division preparatory work designed to develop writing potential and analytical reading skills. More specialized upper division study focuses on particular areas: British literature before 1800; British literature after 1800; American literature; modern literature; literary types, theory, and criticism; creative writing; or expository writing. Six units in upper division comparative literature are required.

Students preparing to obtain the single subject credential in English take a "language arts" program in which courses in communication, journalism, linguistics, and theatre supplement major concentration in English.

The English minor requires twelve units of upper division study that can be tailored to individual requirements.

Teaching is one of the many career opportunities available to English graduates; English studies are also good preparation for radio and television broadcasting, editing, writing, politics, film and library work, journalism, criticism, advertising, public information, public relations, and technical writing.

A study by the Modern Language Association, "English: The Pre-Professional Major," shows that training in English and literature is valuable preparation for futures in law, medicine, business, and federal service.

SDSU Career Services has found that liberal arts graduates in general have profited both in terms of job availability and compensation in the shift from manufacturing to service in the United States economy.

## English Major Honors

(Standard Major)
The English honors program offers excellent students a variation of the major designed to engage them in work commensurate with their abilities. Honors students in the standard English major will take two additional upper division courses appropriate for their field of interest, in which they must maintain an A-grade point average, and successfully complete an Honors Thesis (English 498 or 499 or Comparative Literature 499). Generally, students will apply to this program in their junior year after they have completed at least nine units of lower division preparation for the major and nine units of upper division major requirements with an A- (3.7 GPA) and overall 3.5 GPA. Applicants must also submit an appropriate sample of their critical or creative work. Successful completion of the English honors program will be recognized at graduation.

## English Major Honors

In preparation for the Single Subject Teaching Credential in English Language Arts
With the B.A. Degree in Liberal Arts and Sciences
The English honors program offers excellent students a variation of the major designed to engage them in work commensurate with their abilities. Honors students in the English major in preparation for the Single Subject Teaching Credential in English Language Arts will convert nine [of the twelve units] of electives into two honors courses, in which they must maintain an A-grade point average, and successfully complete an Honors Thesis (English 498 or 499 or Comparative Literature 499). Generally, students will apply to this program in their junior year after they have completed at least nine units of lower division preparation for the major and nine units of upper division major requirements with an A- (3.7 GPA) and overall 3.5 GPA. Applicants must also submit an appropriate sample of their critical or creative work. Successful completion of the English honors program will be recognized at graduation.

## Impacted Programs

The majors in English and English in Preparation for the Single Subject Teaching Credential in English Language Arts are impacted programs. To be admitted to the major in English or English in Preparation for the Single Subject Teaching Credential in English Language Arts, refer to the program description for specific impacted criteria.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## English Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 15011) (SIMS Code: Liberal 112101) OR
Applied Arts and Sciences (Open only to AA-T/TMC)

## (Major Code: 15011) (SIMS Code: Applied 112111)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 54 units in English, comparative literature, and rhetoric and writing studies courses can apply to the degree.

The Bachelor of Arts degree in Applied Arts and Sciences is open only to students who have completed the California Community College Associate in Arts in English for Transfer (AA-T) degree completing the Transfer Model Curriculum (TMC) for English. Contact department adviser.

A minor is not required with this major.
Impacted Program. The major in English is designated as an impacted program and specific criteria are used to admit students. To be admitted to the major in English, students must meet the following criteria:
a. Complete with a minimum GPA of 2.50 and a grade of C (2.0) or better: English 250A or 250B; English 260A-260B; Rhetoric and Writing Studies 200; three units selected from English 220, 280, Comparative Literature 270A or 270B. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Have a cumulative GPA of 2.40 or better.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major. NOTE: The Applied Arts and Sciences degree is open only to students who have completed the California Community College Associate in Arts in English for Transfer (AA-T) degree completing the Transfer Model Curriculum (TMC) for English.

English 250A or 250B; English 260A-260B; Rhetoric and Writing Studies 200; three units selected from English 220, 280, Comparative Literature 270A, 270B. (15 units)

Any grade requirements and GPA requirements listed above for admission to the major in English will also be enforced in Preparation for the Major requirements.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Language Competency Requirement (Applied Arts and Sciences). Students who have completed the California Community College Associate in Arts in English for Transfer (AA-T) degree are required to successfully complete a second college semester or third college quarter in one foreign language. Students will also meet this requirement by successfully completing the third-year level of a high school foreign language.

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above before taking English 508W and earn a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 33 upper division units to include 12 units from module $A, 12$ units from module $B$, six units from module $C$, and three units of electives.

Courses in module A are oriented towards exploring aspects of the development of the English and American literary traditions over time. Courses in module B are oriented towards using literary and cultural studies to engage with a diversity of human societies, viewpoints, and experiences. Courses in module C develop student capacity in scholarly writing, creative writing, editing, publishing, and digital literary content.
a. Twelve units selected from the following: English 510A, 510B, 522-525, 527, 528, 530, 533, 534, 536, 537, 540A, 541A, 541B, 543,544,560. Must include at least three units of English 510A, 522, 530, 533, 534, 536, 537, 540A or 541A.
b. Twelve units selected from the following: English 501-503, 519, 526, 550, 556, 563, Comparative Literature 440, 445, $470,513,561,580,584,594,595,596$. Must include at least three units of comparative literature.
c. Six units selected from the following: English 508W, 562, 570, 571, 573, 576A, 576B, 577, 579, 580, 581W, 584W. Must include at least three units of English 508W.
d. Three units of upper division English or comparative literature courses.
English Honors Variation. Three additional units of upper division English or comparative literature electives, with consent of the undergraduate adviser; and English 498. (39 units)

## Selection of Courses

Prospective majors of sophomore standing may, with the consent of the course instructor and subject to general university regulations (see "Credit for Upper Division Courses" in the section of this catalog on Admission and Registration), substitute six units of upper division electives for six units of lower division work. These courses must be in the same field as those which they replace, and must be approved by the departmental adviser.

Students of junior or senior standing may substitute for any deficiencies in lower division requirements in English (except Rhetoric and Writing Studies 100 and 200) an equivalent number of units of upper division courses selected with the approval of the departmental adviser.

## English Major

In preparation for the Single Subject Teaching Credential in English Language Arts

## With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 15011) (SIMS Code: 112102)

Requirements listed here are for the fulfillment of the English major in preparation for the single subject teaching credential in English language arts. All candidates for a teaching credential must complete all requirements as outlined in this section of the catalog under Dual Language and English Learner Education or Teacher Education. Completion of this major also fulfills 21 units of the General Education program.

See School of Teacher Education for information about the credential program, to include seven to eight additional units required for admission: Education 451 (3), Teacher Education 280 (1), and Special Education 450 (3), 500 (3), or Child and Family Development 590 (4).

A minor is not required with this major.
Impacted Program. The major in English in Preparation for the Single Subject Teaching Credential in English Language Arts is designated as an impacted program and specific criteria are used to admit students. To be admitted to the major in English in Preparation for the Single Subject Teaching Credential in English Language Arts, students must meet the following criteria:
a. Complete with a minimum GPA of 2.50 and a grade of $C$ (2.0) or better: Rhetoric and Writing Studies 100, 200; Communication 103; English 220 or Comparative Literature 270A or 270B; Journalism and Media Studies 200; Humanities 140; Linguistics 101; six units from English 250A and 250B or English 260A and 260B; English 280. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Have a cumulative GPA of 2.40 or better.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major. (30 units) Fulfills 21 units in General Education.

1. Rhetoric and Writing Studies 100 and 200 (General Education I. 2 and 3).
2. Communication 103 (General Education I. 1).
3. English 220 or Comparative Literature 270A or 270 (3 units General Education II. C.2.).
4. Journalism and Media Studies 200 (General Education II. B).
5. Humanities 140 (General Education II.C.2).
6. Linguistics 101 (3 units General Education II.B)
7. English 250 A and 250 B or 260 A and 260 B ( 6 units).
8. English 280.

Any grade requirements and GPA requirements listed above for admission to the major in English in Preparation for the Single Subject Teaching Credential in English Language Arts will also be enforced in Preparation for the Major requirements.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above before taking English 508W and earn a grade of C (2.0) or better (see \#10 below). See "Graduation Requirements" section for a complete listing of requirements.

Major. (46 upper division units) Courses in the major cannot be double-counted.
9. English 502.
10. English 508 W .
11. English 533.
12. For those who took English 250A-250B, select three units from English 510A, 530, 534, 536, 537, 540A, 541A, 541B, and three units from English 510B, 543, 544. For those who took English 260A-260B, select six units from English 519, 522, 523, 524, 525.
13. Theatre 310.
14. Linguistics 430 or 530 .
15. Linguistics $452^{*}, 454$, or $550^{*}$.
16. Rhetoric and Writing Studies 509 AND Teacher Education 362 must be taken concurrently.
17. Diversity Literature Course: Three units selected from Comparative Literature 440, 445, American Indian Studies 430, Chicana and Chicano Studies 380 [or Latin American Studies 380], 450, English 335 [or Chicana and Chicano Studies 335], 365A [or Africana Studies 365A], 365B [or Africana Studies 365B], 450, 519, 550, Theatre 465, Women's Studies 352.
18. One 500-level three unit elective in English or comparative literature.
19. Select one of the following specializations ( 12 units):

Literature: Twelve units in any 500-level courses in English or comparative literature.
English and American Literature: Twelve units in any 500-level courses in English.
Comparative Literature: Twelve units of any 500 -level courses in comparative literature.
Written Expression: Twelve units selected from English 570584W, Rhetoric and Writing Studies 500W.
Linguistics: Twelve units selected from Group A (ESL emphasis): Linguistics $452^{*}, 454,550^{*}$, 555*, 556 or Group B (English language linguistics emphasis): Linguistics 420, 502*, 525*, 526*, 551, 552*, 571.
Theatre: Twelve units selected from Theatre 315, 359*, 460A, 460B, 510, 525*, 580*.
Journalism: Twelve units selected from Journalism and Media Studies 300, 408, 460, 480, 489, 494.

Consult with the English and Comparative Literature honors program adviser for honors program variation.

## Course Sequences

All year courses in English may be taken in either semester, and either semester may be taken singly for credit.

## Student Initiated Courses

Students may petition for a course which falls within the competency of the English department but which is not among the regular course offerings for the present or following semester. Petition forms may be obtained from the department secretary.

## Undergraduate Seminars

Each semester, if adequate staffing permits, the department may offer several of its courses as special, limited-enrollment seminars. These seminars are designed to give English majors (or anyone who has the consent of the instructor) the opportunity as juniors and seniors to engage in advanced work in small discussion groups.

## English Minor

## (SIMS Code: 112101)

The minor in English consists of a minimum of 15 units to include English 220, three units from module A, three units from module $B$, and six units from module $C$. A maximum of three upper division units in creative writing courses selected from English 570, 571, 573, 576A, 577, 579, 580, 581W, 584W.

Module A. Courses in module A explore the development of English and American literary traditions. Three units selected from English 510A, 510B, 522, 523, 524, 525, 527, 528, 530, 533, 534, 536, 537, 540A, 541A, 541B, 543, 544, 560.

Module B. Courses in module B use literary and cultural studies to engage with a diversity of human societies, viewpoints, and experiences. Three units selected from English 501, 502, 503, 519, 526, 550, 556, 563, Comparative Literature 440, 445, 470, $513,561,580,584,594,595,596$.

Module C. Six additional upper division units in English at the 300-, 400-, or 500-level.

The English minor is not available to students majoring in comparative literature. Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Children's Literature Minor

## (SIMS Code: 112136)

The minor in children's literature allows students in a wide variety of fields to benefit from programming and curriculum offered by SDSU's National Center for the Study of Children's Literature. Courses in the literature of young childhood and adolescence benefit students preparing for careers in education, psychology, social work, medicine, or any other field serving children.

The children's literature minor consists of a minimum of 15 units to include English 220,501,502,503, and one additional upper division course in English or comparative literature.

The children's literature minor is not available to students majoring in English or comparative literature. Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Creative Editing and Publishing Minor

## (SIMS Code: 112138)

The minor in creative editing and publishing allows students in a wide variety of fields to sharpen their skills in creative content development and prepare for careers in editing, publishing, and writing.

The creative editing and publishing minor consists of a minimum of 15 units to include English 280, 495 (three units), 576A, 576B, three units selected from Rhetoric and Writing Studies 501, $503 W$, or 507.

The creative editing and publishing minor is not available to students majoring in English or comparative literature. Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Creative Writing Minor

## (SIMS Code: 112139)

The minor in creative writing allows students in a wide variety of fields to benefit from programming and curriculum offered by SDSU's MFA creative writing faculty. Courses in fiction, poetry, screenwriting, creative publishing and editing allow students to sharpen their skills and pursue interests in creative writing in a supportive environment.

The creative writing minor consists of a minimum of 15 units to include English 280, an additional nine units selected from English 570, 571, 573, 576A, 576B, 577, 579, 580, 581W, 584W, and three units of English 495.

The creative writing minor is not available to students majoring in English or comparative literature. Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Children's Literature Certificate

## (SIMS Code: 112108)

The certificate in children's literature allows students to benefit from programming and curriculum offered by SDSU's National Center for the Study of Children's Literature. Designed for students interested in editing and publishing, education, graduate study, library studies, and writing, the certificate provides specialized study in children's and young adult literature.

Certificate courses examine formal and critical shifts that have occurred over the course of the history of children's literature, introduce theoretical developments, and survey the history of literature for children and young adults. Students gain broad and rigorous training in the analysis, interpretation, critique, and appreciation of diverse forms of children's/young adult literature, which may broaden professional and academic opportunities.

The certificate in children's literature consists of a minimum of 18 units to include English 220, 501, 502; six units of English 503; and three units selected from Theatre 310, 315, 510, 580, History 402, Music 343.

Under certain circumstances a maximum of six units of transfer credit may count toward the certificate. Such courses must be evaluated and approved by the certificate adviser. A maximum of six units in the certificate may count toward the major in English or the major in comparative literature but may not count toward the minor in English, the minor in comparative literature, or the minor in children's literature. Students should consult with the certificate adviser to develop an individualized program of study.

A minimum grade point average of 3.0 or better must be maintained in certificate coursework, with no less than a grade of $C$ (2.0) in any course.

## Creative Editing and Publishing Certificate

## (SIMS Code: 112171)

The certificate in creative editing and publishing prepares students for careers in literary publishing, or for other careers where advanced editing and creative writing skills are desirable. The certificate is designed for all individuals who would like to learn more about the literary publishing industry and obtain publishing skills necessary to start careers as literary agents, literary book or magazine publishers, literary editors, and literary publicists.

The certificate provides students with broad exposure to current issues in literary publishing, access to numerous publishing professionals, and hands-on publishing experience. It will enhance employment opportunities and open a broad range of professional choices in cooperative employment and in the post-degree job market as skills are acquired. The certificate develops students' skills in literary editing, publishing, and writing both through theoretical and practical applications.

The certificate in creative editing and publishing consists of a minimum of 18 units to include English 280, 495 (3 units), 576A, 576B, 579; and three units selected from Rhetoric and Writing Studies 501, 503W, or 507.

A maximum of six units of transfer credit may be applied to the certificate. A maximum of six units may be substituted with other English and comparative literature courses with consent of the adviser. Students should consult with the adviser before selecting any courses in order to develop an individualized program of study.

A minimum grade point average of 3.0 or better must be maintained in certificate coursework, with no less than a grade of $C$ (2.0) in any course.

## Creative Writing Certificate <br> (SIMS Code: 112172)

The Department of English and Comparative Literature offers the certificate in creative writing in order to provide a structured and multifaceted curriculum for those who wish to pursue their interest in writing creative nonfiction, literary translation, poetry, scripts for the screen, and/or short fiction. The certificate program is a unique immersion in the study and practice of the writer's art.

The certificate is designed for students wishing to update, structure, and formalize their knowledge and interest in the study of the writer's art. Teachers and other professionals will use the certificate for advancement in employment; all other aspiring writers serious about their craft will be able to build a writing portfolio, develop regular writing practices, and formalize their training.

The certificate in creative writing consists of a minimum of 18 units to include English 280, 495 ( 3 units); 12 units selected from English 570, 571, 573, 576A, 577, 579, 580, 581W, or 584W.

A maximum of six units of transfer credit may be applied to the certificate. A maximum of six units may be substituted with other English and comparative literature courses with consent of the adviser. Students should consult with the adviser before selecting any courses in order to develop an individualized program of study.

A minimum grade point average of 3.0 or better must be maintained in certificate coursework, with no less than a grade of $C$ (2.0) in any course.

## Courses (ENGL)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

ENGL 100. Rhetoric of Written Argument (3) [GE]
(Same course as Rhetoric and Writing Studies 100)
International students are advised to take Linguistics 100B.
Prerequisite: Satisfaction of the SDSU Written Communication Assessment requirement. (See Graduation Requirements section of catalog.) Proof of completion of prerequisite required.

Writing and reading as critical inquiry, designed to help students undertake university-level writing projects. Focus on rhetoric of written arguments. Students learn to use sources in their writing and make appropriate decisions about structure, cohesion, and rhetorical conventions. Not open to students with credit in a high-er-numbered composition course or Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100B or Rhetoric and Writing Studies 100 or 105B.

## ENGL 157. Comics and History (3) [GE]

(Same course as History 157)
Aesthetics, interplay of texts and images, visual communication, and changes over time.
ENGL 200. Rhetoric of Written Arguments in Context (3) [GE]
(Same course as Rhetoric and Writing Studies 200)
International students are advised to take Linguistics 200.
Prerequisites: Satisfaction of the SDSU Written Communication Assessment requirement and Rhetoric and Writing Studies 100 [or English 100] or 105B, or Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100B. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Further practice in writing, reading, and critical thinking. Emphasis on rhetoric of written arguments in context and using multiple sources in writing. Continued attention to structure, cohesion, and rhetorical conventions. Not open to students with credit in Africana Studies 200, American Indian Studies 225, Chicana and Chicano Studies 200, Linguistics 200, or Rhetoric and Writing Studies 200. Completion of Rhetoric and Writing Studies 200 may require completion of the library workbook assignment.

## ENGL 220. Introduction to Literature (3) [GE]

Prerequisites: A grade of C (2.0) or better in English 100 [or Rhetoric and Writing Studies 100], Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100B or Rhetoric and Writing Studies 105B. Proof of completion of prerequisite required: Copy of transcript.

Inquiry into basic nature of literature. What prompts humankind to creation of imaginative literature? What purposes does literature serve in cultural life of humanity? What are its social, philosophical, spiritual, and esthetic values? Some consideration may be given to techniques and major critical theories, but focus will be on practical criticism for nonspecialists. Specific works studied will be representative of several genres, cultures, and periods of literature.

## ENGL 250A-250B. Literature of the United States (3-3)

Prerequisites: A grade of $C$ (2.0) or better in Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100B or Rhetoric and Writing Studies 100 [or English 100] or 105B.

United States literature from colonial period to present. Semester I: from beginning to Civil War. Semester II: Civil War to present. Recommended for English majors.
ENGL 260A-260B. English Literature (3-3)
Prerequisites: A grade of $C$ (2.0) or better in English 100 [or Rhetoric and Writing Studies 100], Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100B or Rhetoric and Writing Studies 105B.

English literature from Anglo-Saxon period to present, with emphasis on major works in literary tradition. Semester I: Ends with neoclassical period. Semester II: Begins with Romantic writers.

## ENGL 280. Introduction to Creative Writing (3)

Prerequisites: A grade of C (2.0) or better in English 100 [or Rhetoric and Writing Studies 100], Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100B or Rhetoric and Writing Studies 105B.

Theory and practice of poetry and fiction, with emphasis on basic concepts and techniques.
ENGL 296. Experimental Topics (1-4)
Prerequisites: A grade of C (2.0) or better in English 100 [or Rhetoric and Writing Studies 100], Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100B or Rhetoric and Writing Studies 105B.

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

## ENGL 301. The Psychological Novel (3) [GE]

Psychological novel from its inception to present, including major works from a variety of cultures. Readings designed to aid students in discovering insights which great novelists have unearthed in their explorations of the human psyche.
ENGL 305. Literature and Environment (3) [GE]
Environmental thought and consciousness as expressed in literature, emergence of modern and contemporary environmental thought, and impacts of literature on environmental awareness.

## ENGL 306A-306W. Children's Literature and Advanced

 Composition (3-3)Prerequisites: English 200 [or Rhetoric and Writing Studies 200]. English 306A and 306W must be taken concurrently. Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a grade of $C$ (2.0) or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.
A. Critical and historical analysis of children's literature in a variety of genres and forms.
W. Advanced composition; improvement of student skills through writing assignments based upon reading and work in the lecture part. Primarily designed to meet Graduation Writing Assessment and Literature requirements for Liberal Studies-Emphasis in Education.
ENGL 308W. Literary Study: Analysis, Research, and Writing (3)
Prerequisites: Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a grade of C (2.0) or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Methods of literary analysis; concepts and terminology of literary study; research methods. Modes of writing about literature, with emphasis on the research paper.
ENGL 335. Chicana and Chicano Literature (3) [GE]
(Same course as Chicana and Chicano Studies 335)
Ideas, forms, history of significant Chicana and Chicano prose, poetry, and other literary genres.
ENGL 365A. African American Literature to 1900 (3) [GE] (Same course as Africana Studies 365A)
Eighteenth and nineteenth century writing by African American authors. Issues of literary form, canon formation, and sociopolitical impact of the literature upon African American culture.

ENGL 365B. African American Literature After 1900 (3) [GE] (Same course as Africana Studies 365B)
Writing by African American authors after 1900. Issues of literary form, canon formation and sociopolitical impact of the literature upon African American and American culture of the twentieth and twenty-first centuries.
ENGL 401. Childhood's Literature (3) [GE]
Analysis of influential and/or neglected literature for children and young adults in a variety of genres and forms. Not applicable to English or comparative literature majors. Majors are to take English 501.

ENGL 409. Science Fiction (3) [GE]
How authors have responded to growing impact of science and technology on people's lives and imaginations. Representative works by authors such as Kobo Abe, Bradbury, Butler, Delaney, DeLillo, Dick, Gibson, Heinlein, Hoban, Huxley, Kapek, LeGuin, Murakami, Orwell, Poe, Russ, Shelley, Verne, Wells, Zamyatin, and others.
ENGL 450. LGBT Literature and Culture (3) [GE]
LGBT knowledge and identities as expressed in literature and culture; changing nature of same-sex desire, sexual behavior, and same-sex relationships from antiquity to present.
ENGL 491. Contemporary Topics in Literature (3)
Exploration of writers, works and topics in fiction, poetry, drama, and film, emphasizing the relationship between literature and current concerns. Topics include the city in fiction and film, literature and identity, literature of death, literature of contemporary myth and folklore, women in literature. Primarily for the general student not specializing in English or comparative literature. May count only as an elective course toward the English major. May be repeated with new title and content. Maximum credit six units. See Class Schedule for specific content.
ENGL 493. Literature and Film (3)
Relationships between film and genres of literature, focusing on a critical comparison of the techniques of rhetoric, fiction, and drama and those of film. Topics include literature and film, novel into film, drama and film, reading film. Primarily for the general student not specializing in English or comparative literature. May count only as an elective course toward the English major. May be repeated with new title and content. Maximum credit six units.
ENGL 494. Modern Fiction of the United States (3) [GE]
Representative works by twentieth-century American authors such as Cather, Hemingway, Steinbeck, Faulkner, Fitzgerald, Ellison, Welty, Bellow, Vonnegut, Heller, Walker, others. Primarily for the general student not specializing in English or comparative literature. May count toward the English major only as an elective.
ENGL 495. Internship (1-3) Cr/NC
Practical work experience in a field related to English and comparative literature. Work performed under joint direction of activity sponsor and instructor. Maximum credit six units. Not applicable to requirements for English or comparative literature majors.

## ENGL 496. Selected Topics in English (1-4)

Specialized study of a selected topic in literature. May be repeated with new title and content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

## ENGL 498. Seminar: English Honors Thesis (3) Cr/NC

Prerequisites: Admission to departmental honors program and consent of honors department director.

Capstone class to prepare students who have been accepted into the department's honors program to write an undergraduate thesis by emphasizing advanced research methods and critical or creative writing skills.

## ENGL 499. Special Study (1-3)

Prerequisites: Consent of instructor and approval of department chair.

Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

## ENGL 501. Literature for Children (3)

Prerequisites: Six lower division units in literature and/or creative writing.

Critical, historical, and ideological analysis of literature intended for and read by children in a variety of genres and forms. This course cannot be used in place of English 401 to satisfy General Education requirements.

## ENGL 502. Adolescence in Literature (3)

Prerequisites: Six lower division units in literature and/or creative writing.

Critical, historical, and ideological analysis of adolescent literature to include works in a variety of forms and genres read by, written for, or that feature adolescents.

## ENGL 503. Topics in Children's Literature (3)

Prerequisites: Six lower division units in literature and/or creative writing.

Topics in youth culture, literature, and media to include aesthetics, gender, multiculturalism, and sexuality. Fantasy, illustrated, non-fiction, and science fiction books. Maximum credit six units.

## ENGL 508W. The Writing of Criticism (3)

Prerequisites: Six lower division units in literature and/or creative writing. Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a grade of C (2.0) or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Theory and practice of literary criticism. Emphasis on the work of important critics and on development of student's own critical writing.

## ENGL 510A. Earlier Histories of British and American

Literature (3)
Prerequisites: Six lower division units in literature and/or creative writing.

Historical movements and developments in English language literature before 1800. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

## ENGL 510B. Later Histories of British and American

 Literature (3)Prerequisites: Six lower division units in literature and/or creative writing.

Historical movements and developments in English language literature after 1800. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.
ENGL 519. Ethnic Literatures of the United States (3)
Prerequisites: Six lower division units in literature and/or creative writing.

Works from United States ethnic literatures, with emphasis on formerly excluded traditions as African-American, Hispanic and Chicano, Asian-American, and American Indian.
ENGL 522. Literature of the United States, 1800-1860 (3)
Prerequisites: Six lower division units in literature and/or creative writing.

Representative works by United States writers from 1800 to 1860; likely to include works by Emerson, Hawthorne, Melville, Poe, Stowe, Thoreau, Whitman, and others. See Class Schedule for specific content.
ENGL 523. Literature of the United States, 1860-1920 (3)
Prerequisites: Six lower division units in literature and/or creative writing.

Representative works by United States writers from 1860 to 1920; likely to include works by Charles Chesnutt, Kate Chopin, Stephen Crane, Emily Dickinson, Henry James, Mark Twain, Edith Wharton, and others. See Class Schedule for specific content.

## ENGL 524. Literature of the United States, 1920-1960 (3)

Prerequisites: Six lower division units in literature and/or creative writing.

Representative works by United States writers from 1920 to 1960; likely to include works by Willa Cather, T. S. Eliot, William Faulkner, F. Scott Fitzgerald, Ernest Hemingway, Zora Neale Hurston, Eugene O'Neill, Katherine Anne Porter, Ezra Pound, John Steinbeck, and others. See Class Schedule for specific content.
ENGL 525. Literature of the United States, 1960 to Present (3)
Prerequisites: Six lower division units in literature and/or creative writing.

United States writers from 1960 to the present; likely to include works by Edward Albee, Saul Bellow, Allen Ginsberg, Joseph Heller, Maxine Hong Kingston, Norman Mailer, Toni Morrison, Sylvia Plath, Adrienne Rich, Kurt Vonnegut, Eudora Welty, and others. See Class Schedule for specific content.

## ENGL 526. Topics in Literature of the United States (3)

Prerequisites: Six lower division units in literature and/or creative writing.

Topics in United States literature to include the literature of the South, Black writers in the U.S., the frontier and U.S. literature, the outcast in U.S. literature, the immigrant experience in U.S. literature. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

## ENGL 527. Genre Studies (3)

Prerequisites: Six lower division units in literature and/or creative writing.

Study of a specific literary genre or genres, such as the novel, tragedy, epic, and lyric. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

## ENGL 528. Authors (3)

Prerequisites: Six lower division units in literature and/or creative writing.

Works of a major author or, if useful comparisons and juxtapositions warrant, works of two or three authors, such as Jane Austen, Melville, Emerson, and Thoreau. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

## ENGL 530. Chaucer (3)

Prerequisites: Six lower division units in literature and/or creative writing.

Chaucer's works, with emphasis on The Canterbury Tales and Troilus and Criseyde.
ENGL 533. Shakespeare (3)
Prerequisites: Six lower division units in literature and/or creative writing.

An introduction to the writings of Shakespeare.

## ENGL 534. Study of Shakespeare (3)

Prerequisite: English 533.
Advanced study of Shakespeare's achievement as poet and playwright. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

## ENGL 536. British Literary Periods, Beginnings to 1660 (3)

Prerequisites: Six lower division units in literature and/or creative writing.

Study of a literary period such as the Middle Ages or Renaissance. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

## ENGL 537. Milton (3)

Prerequisites: Six lower division units in literature and/or creative writing.

Milton's writings, with emphasis on Paradise Lost.

## ENGL 540A. English Fiction (3)

Prerequisites: Six lower division units in literature and/or creative writing.

The development of English fiction from its beginnings to the end of the eighteenth century. See Class Schedule for specific content.

## ENGL 541A-541B. English Drama (3-3)

Prerequisites: Six lower division units in literature and/or creative writing.

English dramatic literature from its beginnings to the present. Semester I: From the beginning to 1642. Semester II: Period following reopening of the theatres in 1660. See Class Schedule for specific content.
ENGL 543. British Literary Periods, 1800-1900 (3)
Prerequisites: Six lower division units in literature and/or creative writing.

Study of a literary period such as the Romantic or Victorian Age. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.
ENGL 544. British Literary Periods, 1900-Present (3)
Prerequisites: Six lower division units in literature and/or creative writing.

Study of a literary period such as the Postmodern Era. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.
ENGL 550. Queer Texts and Contexts (3)
Prerequisites: Six lower division units in literature and/or creative writing.

Queer knowledge and identities as expressed in literature and culture, to include queer theory, history, and experience. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.
ENGL 556. Gothic Literary Tradition (3)
Prerequisites: Six lower division units in literature and/or creative writing or graduate standing.

Gothic literary tradition from its beginnings to the present day. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.
ENGL 560. Literature in the Digital Age (3)
Prerequisites: Six lower division units in literature and/or creative writing or graduate standing.

Shifting literary landscape in the digital age. Adapting printbased literature and reading practices to a digital world and digital literary marketplace. Digital-born literature. New narrative and poetic forms for computational media. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.
ENGL 562. Digital Methods in Literary Studies (3)
Prerequisites: Six lower division units in literature and/or creative writing or graduate standing.

Analyzing digitized literary texts and creating born-digital literature. Studying and creating literature digitally. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.
ENGL 563. Literature and Culture (3)
Prerequisites: Six lower division units in literature and/or creative writing.

Study of literature in relation to a specific culture idea or phenomenon, such as literature and the law, literature and technology. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.
ENGL 570. Techniques of Poetry (3)
Prerequisites: Three lower division units in literature and/or creative writing and English 280.

Techniques of poetry from the writer's point of view. Introduction to critical and theoretical literature on poetry. Includes a creative writing workshop.
ENGL 571. Techniques of the Short Story (3)
Prerequisites: Three lower division units in literature and/or creative writing and English 280.

Techniques of the short story from the writer's point of view. Introduction to critical and theoretical literature on the short story. Includes a creative writing workshop.

ENGL 573. Techniques of the Novel (3)
Prerequisites: Three lower division units in literature and/or creative writing and English 280.

Techniques of the novel from the writer's point of view. Introduction to critical and theoretical literature on the novel. Includes a creative writing workshop.
ENGL 576A. Literary Publishing and Editing Workshop A (3)
Prerequisites: Six lower division units in literature and/or creative writing.

Survey of literary publishing and editing industry. Practical experience in a variety of publishing and editing skills, interaction with industry professionals, and critical writing. See Class Schedule for specific content. (Formerly numbered English 576.)
ENGL 576B. Literary Publishing and Editing Workshop B (3)
Prerequisites: Six lower division units in literature and/or creative writing or graduate standing.

Practical experience in small-press literary publishing. Creating and running a press to publish print and digital texts. Tutorials and guest lectures. See Class Schedule for specific content.
ENGL 577. Techniques of Screenwriting (3)
Prerequisites: Six lower division units in literature and/or creative writing. English 280 or Television, Film, and New Media 110 or 510 for television, film, and new media majors.

Techniques of screenwriting. Introduction to critical and theoretical literature on screenwriting. Includes a creative writing workshop.
ENGL 579. Topics in Creative Writing (3)
Prerequisites: Three lower division units in literature and/or creative writing and English 280.

Techniques of creative writing focusing on a specialized genre such as comedy, science fiction, and biography. Study of the critical and theoretical literature on the genre. Includes a creative writing workshop. See Class Schedule for specific content. Maximum credit six units.

## ENGL 580. Writing of Poetry (3)

Prerequisites: Six lower division units in literature and/or creative writing and English 570.

A creative writing workshop in poetry. Continuation of English 570. Maximum credit six units.

ENGL 581W. Writing of Fiction (3)
Prerequisites: Three lower division units in literature and/or creative writing and English 280. Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a grade of C (2.0) or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

A creative writing workshop in fiction. Continuation of English 571. Maximum credit six units.

ENGL 584W. Writing Informal Essays (3)
Prerequisites: Three lower division units in literature and/or creative writing and English 280. Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a grade of $C(2.0)$ or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

A creative writing workshop in nonfiction, especially the essay as an art form. Maximum credit six units.

ENGL 596. Selected Topics in English (1-3)
Selected topics in English. May be repeated with new content and approval of instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## Comparative Literature

See this section of catalog under "Comparative Literature."

## GRADUATE COURSES

Refer to the Graduate Bulletin.

# Environmental Engineering 

IN THE COlLEGE OF ENGINEERING

OFFICE: Engineering 424
TELEPHONE: 619-594-6071
E-MAIL: ccee@sdsu.edu
WEBSITE: http://ccee.sdsu.edu
The undergraduate degree in Environmental Engineering is accredited by the Engineering Accreditation Commission (EAC) of ABET, http://www.abet.org.

## Faculty

Emeritus: Buyuksonmez, Gurol, Stratton
Chair: Supernak
The Blasker Chair in Environmental
Engineering: Garoma Ararsso
The William E. Leonhard, Jr. Chair in Civil, Construction,
and Environmental Engineering: Mladenov
Professors: Garoma Ararsso, Supernak
Associate Professor: Mladenov
Assistant Professors: Dykstra, Verbyla
Offered by the Department of Civil, Construction, and Environmental Engineering
Doctor of Philosophy degree in engineering sciences:
(bioengineering), (electrical and computer engineering),
(mechanical and aerospace engineering), (structural engineering).
Master of Engineering.
Master of Science degree in civil engineering.
Concentration in environmental engineering.
Major in civil engineering with the B.S. degree.
Major in construction engineering with the B.S. degree.
Major in environmental engineering with the B.S. degree.

## Mission of the Department

The mission of the Department of Civil, Construction, and Environmental Engineering is to ensure student success by providing a high-quality education through focused instruction, research, and continuing professional development for the benefit of the engineering profession, the environment, and society.

The objective of the program is to give the student a basic knowledge of civil, construction, and environmental engineering, as well as the interdisciplinary background and skills to meaningfully participate in and contribute technical advances toward this profession. The program integrates technical aspects with studies in the social sciences and humanities to ensure appropriate sensitivity to socially related problems.

Instruction is given both at the undergraduate level, leading to the bachelor's degree, and at the graduate level, leading to the master's or doctoral degrees. The undergraduate program builds upon concepts of mathematics, physics, chemistry and basic engineering with specialized study in civil, construction, and environmental engineering. Engineering design is emphasized, particularly in conjunction with computer utilization and practical engineering problems. Aspects of safety and engineering ethics are woven throughout the program. Breadth and depth of social science and humanities studies is assured by department approved courses. Completion of the under-graduate degree prepares the student for an entry-level professional position in addition to informal or formal graduate studies.

Many students who complete the undergraduate programs of the department choose to continue their formal studies on a full- or part-time basis at San Diego State University or at another institution. (See the Graduate Bulletin for additional information.)

The civil, construction, and environmental engineering programs are enhanced through cooperation with the American Society of Civil Engineers, the American Public Works Association, the

Associated General Contractors, the Chi Epsilon Civil Engineering Honor Society, and other national organizations who sponsor student chapters to further aid the student's professional development. The chapters at San Diego State University have won many awards in regional and national competition with other schools throughout the country.

## Program Educational Objectives

Graduates of the environmental engineering program will (1) be successful engineers in their respective fields of work; (2) be continually progressing in their chosen careers through formal and informal professional development; and (3) be contributing to their profession for the betterment of society and the environment.

## The Blasker Chair in Environmental Engineering

The Blasker Chair in Environmental Engineering was established by an endowment from the Blasker-Rose-Miah Endowment Fund of the San Diego Foundation. The fund was created in honor of Mr. Samuel Blasker who left \$8 million to the San Diego Foundation. Mr. Blasker was a successful aeronautical engineer and a businessman with a vision to nurture and develop unique and innovative discoveries and experiences which may be of benefit to humanity.

The current appointee to the Chair, Dr. Temesgen Garoma Ararsso, is an accomplished scholar with teaching and research emphasis on renewable energy, resource recovery, and water and wastewater treatment.

## The William E. Leonhard, Jr. Chair in Civil, Construction, and Environmental Engineering

The William E. Leonhard, Jr. Chair in Civil, Construction, and Environmental Engineering is funded with an endowment created by generous gifts from William G. Leonhard, Jr. and his parents, William E. and Wyllis M. Leonhard. After Bill Leonhard graduated from San Diego State in 1964, he entered a career in the Air Force, rising to the rank of colonel. In January 1990, he retired from the Air Force, spent the next several years in private industry, and retired again in 1998.

The current chair, Dr. Natalie Mladenov, promotes excellence in undergraduate education, research in environmental engineering, and conducts scholarly activities on the topic of water quality in environmental engineering.

## Transfer Credit

No credit will be given for upper division engineering coursework taken at an institution having an engineering program which has not been accredited by the Engineering Accreditation Commission (EAC) of ABET, unless the student successfully completes the first 12 units of engineering work attempted at this university. At that time, and upon recommendation of the department, unaccredited work will be evaluated for full or partial credit.

## The Major

Environmental engineering involves the identification and design of solutions for environmental problems. Society's most crucial environmental problems, such as providing safe drinking water, treatment and proper disposal of wastes, water and air pollution control, remediation of sites contaminated with spills or improper disposal of hazardous substances, are handled by environmental engineers. Environmental engineers are technical professionals who possess the scientific knowledge to identify, design, build and operate systems that protect the environment from the impact of human activities, and as such make modern society possible.

The environmental engineering field and environmental engineering education are multidisciplinary. The B.S. degree provides a solid foundation in the fundamentals of mathematics, physics, chemistry, and engineering design that are needed to practice the profession or to pursue a graduate degree. Environmental engineering education also includes a range of other disciplines, such as biology, computer science, ecology, economics, geological sciences, and public health. To be able to address the spectrum of issues facing the environment, environmental engineers are broadly educated, as well as technically trained.

Environmental engineers are needed in both the private and public sectors. They are employed by engineering consulting firms that work in environmental pollution control, industries that need to comply with pollution emission and discharge regulations, private and municipal agencies that supply drinking water, treat and dispose wastes, government agencies that monitor and regulate waste discharges and air emissions, private and government laboratories, and universities that conduct environmental research, international agencies that transfer knowledge to the developing world, and public-interest groups that advocate environmental protection.

## Retention Policy

The engineering program expects all majors will make reasonable academic progress toward the degree. Engineering premajors who have either (1) completed major preparatory courses, earned 60 units, but have less than a 2.7 cumulative GPA or (2) earned 60 units but have not completed major preparatory courses and/or have less than a 2.7 cumulative GPA may be removed from the premajor and placed in undeclared.

## Impacted Program

The environmental engineering major is an impacted program. To be admitted to the environmental engineering major, students must meet the following criteria:
a. Complete with a grade of $\mathrm{C}(2.0)$ or better: Civil Engineering 225; Chemistry 202 (or 200); Mathematics 150, 151; Physics 195, 196. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Have an overall cumulative GPA of 2.7.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Environmental Engineering Major

## With the B.S. Degree

## (Major Code: 09221) (SIMS Code: 442002)

This program requires 127 units to include general education. In addition, the total number of units specified in each elective category represents a minimum requirement.

All students in environmental engineering pursue a common program of study in basic sciences, engineering, and environmental engineering fundamentals and design. The program allows three units of "professional electives" which can be selected from available courses in environmental chemistry, environmental microbiology, water resources, and other areas.

Preparation for the Major. Environmental Engineering 101; Aerospace Engineering 280; Biology 204, 204L; Chemistry 130, 202 (or 200); Civil Engineering 121, 160 (or Statistics 250), 220, 225; Mathematics 150, 151, 252; Physics 195, 195L, 196. (46 units)

Civil Engineering 225; Chemistry 202 (or 200); Mathematics 150, 151; Physics 195, 196 must be completed with a grade of C (2.0) or better. These courses cannot be taken for credit/no credit (Cr/NC).

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 45 upper division units to include Environmental Engineering 355, 356, 363, 445, 554, 556, 558; Aerospace Engineering 340; Biology 315; Civil Engineering 444, 462, 495; Construction Engineering 330; Mechanical Engineering 350; and three units of professional electives selected from the following: Environmental Engineering 499, 555, Civil Engineering 445, 530, 531, 545, Geography 570, or Geological Sciences 530.

## Courses (ENV E)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

NOTE: Proof of completion of prerequisites (copy of transcript) is required for all courses which list prerequisites.

## LOWER DIVISION COURSES

## ENV E 101. Environmental Engineering Seminar (1)

Breadth and depth of environmental engineering field through presentations by invited faculty, graduate students, guests and seminar enrollees; including individual library research with written and oral presentations on selected environmental topics.

## ENV E 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

## ENV E 320. Designing Solutions for Environmental

 Problems (3) [GE]Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning, II.A. Natural Sciences and Quantitative Reasoning.

Human interaction with the land, water and air environment; environmental pollution; role of engineering in solving environmental problems. Not open to civil or environmental engineering majors.

## ENV E 355. Environmental Engineering (3)

Prerequisites: Chemistry 202 (or 200). Approved upper division engineering major, minor, or another major approved by the College of Engineering. Proof of completion of prerequisites required: Change of major form or other evidence of acceptable major code.

Causes and effects of environmental problems and engineering methods to control them.
ENV E 356. Environmental Chemistry for Engineers (3)
Prerequisites: Chemistry 130 and Environmental Engineering 355.

Underlying principles of chemistry needed to solve environmental problems and covers the fundamentals of quantitative water and wastewater analysis, to include statistical analysis. Environmental applications in physical, equilibrium, organic, colloidal, and biochemistry concepts.

## ENV E 363. Environmental Engineering Laboratory (3)

Two lectures and three hours of laboratory.
Prerequisite: Environmental Engineering 355.
Analysis of natural waters and wastewaters. Sampling and analysis of hazardous environmental pollutants. Techniques to analyze

## solid waste.

## ENV E 445. Water and Wastewater Treatment Systems (3)

Prerequisites: Environmental Engineering 355 and credit or concurrent registration in Civil Engineering 444.

Basic water chemistry, water quality criteria and standards, water usage and distribution. Biological, chemical, and physical processes to treat wastewater. Design of water and wastewater treatment unit processes. Potable and non-potable water reuse. Wastewater collection. Not open to students with credit in Environmental Engineering 441 and 442.

## Environmental Engineering

ENV E 496. Advanced Environmental Engineering Topics (1-3)
Prerequisite: Consent of instructor.
Modern developments in environmental engineering. See Class Schedule for specific content. Maximum credit six units for any combination of Environmental Engineering 496, 499 and 596.

## ENV E 499. Special Study (1-3) Cr/NC

Prerequisite: Consent of instructor.
Individual study in the area of environmental engineering. Maximum credit six units for any combination of Environmental Engineering 496, 499 and 596.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

## ENV E 554. Process Fundamentals of Environmental

Systems (3)
Prerequisites: Environmental Engineering 355 with a grade of $C$ (2.0) or better, Aerospace Engineering 340, Civil Engineering 444, and Mechanical Engineering 350.
Equilibrium and kinetics of chemical and biological reactions of environmental systems. Considerations of mass-transfer and fluid dynamics in water quality management and air pollution control.
ENV E 555. Sustainable Water and Sanitation Systems (3)
Two lectures and two hours of technical activity and laboratory.
Prerequisite: Environmental Engineering 355.
Design and selection of technologies for water delivery, reuse, sanitation, and treatment in developed and developing communities.

## ENV E 556. Air Pollution Engineering (3)

Prerequisites: Senior standing and Environmental Engineering 355.

Sources of air pollutants. Transportation, dispersion, and transformation of pollutants in the atmosphere. Measurement and control of air pollution.

## ENV E 558. Solid and Hazardous Waste Engineering (3)

Prerequisites: Senior standing and Environmental Engineering 355.

Municipal solid and hazardous solid wastes from an environmental engineering perspective, including waste minimization and recycling. Engineered volume reduction through composting, incineration, mechanical compaction, and other methods. Ultimate disposal, landfill design and legislative regulations.

## ENV E 596. Advanced Environmental Engineering Topics (1-3)

Prerequisite: Consent of instructor.
Modern developments in environmental engineering. May be repeated with new content. See Class Schedule for specific content. Maximum credit of six units for any combination of Environmental Engineering 496, 499 and 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

For additional courses which are electives in the environmental engineering program, refer to "Civil Engineering" in this section of the catalog.

## GRADUATE COURSES

## Refer to the Graduate Bulletin.

# Environmental Sciences 

In the College of Sciences<br>Administered by the Department of Geological Sciences

OFFICE: Geology/Mathematics/Computer Science 237
TELEPHONE: 619-594-5587
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Offered by the College of Sciences
Major in environmental sciences with the B.S. degree in applied arts and sciences.

## The Major

Environmental sciences is an interdisciplinary program leading to a Bachelor of Science degree in applied arts and sciences. The program will provide the student with a rigorous and broad foundation in those sciences most relevant to environmental issues. While the focus is on the physical environmental sciences, some coursework is required in biology, computer science, geography, and statistics. Those students wishing to concentrate more on the biological aspects of the environment, should consider the ecology emphasis offered by the Department of Biology.

Upon completion of the degree, students will be prepared to understand and contribute to a broad range of environmental problems confronting society. This major should be especially attractive to students who wish a broader background in the environmental sciences than is easily offered by individual departments. The major will prepare the student for employment in diverse situations in the dynamic and ever-changing environmental science job market. It will also be an excellent undergraduate major for students planning to go on to graduate school in any of the environmental sciences.

## Advising

Students are required to meet with the undergraduate adviser in order to declare the major. Students wishing to major in environmental sciences are urged to meet with the adviser during their first semester.

## Impacted Program

The environmental sciences major is an impacted program. To be admitted to the environmental sciences major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Environmental Sciences Major

With the B.S. Degree in Applied Arts and Sciences
(Major Code: 49011) (SIMS Code: 777001)
All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." Individual master plans are filed with both the environmental sciences adviser and the Office of Advising and Evaluations.

A minor is not required with this major.
Preparation for the Major. Environmental Science 100 [or Sustainability 100]; Biology 203, 203L, 204, 204L; Biology 215 or Statistics 250; Chemistry 200; Geography 101; and Mathematics 124, Physics 180A, 180B, 182A, 182B or Mathematics 150, 151, Physics 195, 195L, 196, 196L. (34-38 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.
Study Abroad Requirement. All environmental sciences majors are required to participate in an international experience. Students participate in residence for two or more weeks (exceptions must be approved by the dean of the college for students who, because of serious and compelling life events or physical limitations, cannot meet this requirement). Majors must complete one of the following with the approval of the undergraduate adviser;

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Semester Abroad Program;
4. An SDSU Study Travel Program;
5. General Studies 450;
6. Science 350.

Major. A minimum of 36-37 upper division units to include Environmental Science 498A-498B; Biology 354; Geography 511; Geography 484 or 591 and 591L or Geological Sciences 505; Geological Sciences 305 or Environmental Engineering 355; 18 units selected from Environmental Science 301, 544 [or Biology 544], Biology 350, 517, 540, Chemistry 571, Computer Science 558 , Economics 455 or 456 , Geography $370,409,570,572,574$, Geological Sciences 530 or 551, Mathematics 336, Science 350.

## Courses (ENV S)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

ENV S 100. Environmental Sciences (3) [GE]
(Same course as Sustainability 100)
The earth as an ecosystem composed of biological, chemical, and physical systems and how these systems interact with one another and the human population.

## ENV S 299. Special Study (1-3)

Prerequisites: Consent of program director and instructor. Individual study.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

## ENV S 301. Energy and the Environment (3) [GE]

Prerequisites: Completion of the General Education requirements in Communication and Critical Thinking and Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning.

Fundamental physical concepts underlying energy, its conversion, and impact on the environment.
ENV S 302. Climate Change Solutions (3) [GE]
Prerequisites: Completion of the General Education requirements in Communication and Critical Thinking and Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning.

Carbon-neutral societies, human-nature harmonious communities, and optimal applications of climate and natural resources. Climate change actions, data visualization, governance, mitigation policies, narrative, and technologies. Locally and globally scalable solutions for climate changes.

## ENV S 496. Selected Topics in Environmental Science (1-4)

Prerequisite: Consent of instructor.
Selected topics in environmental and related sciences. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

## Environmental Sciences

ENV S 498A-498B. Senior Seminar in Environmental
Sciences (3-3) Cr/NC
Prerequisite: Senior standing in the environmental sciences major.

Research projects related to an environmental issue in the San Diego and California region.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)

## ENV S 544. Terrestrial Ecosystems and Climate Change (3)

(Same course as Biology 544)
Prerequisite: Biology 354.
Controls on fluxes and stocks of nutrients within terrestrial ecosystems, ecosystem responses, feedbacks to climate change. Climate systems, water transport, production and decomposition, nutrient cycling, stable isotopes, spatial and temporal integration.
ENV S 596. Advanced Topics in Environmental Science (1-4)
Prerequisite: Consent of instructor.
Advanced special topics in environmental sciences. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## Environmental Studies

Refer to "Sustainability" in this section of the catalog.
Refer to "Environmental Studies Certificate" in
"Interdisciplinary Programs" in this section of the catalog.

# European Studies <br> In the College Arts and Letters 

OFFICE: Storm Hall 224A
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E-MAIL: euro-studies@sdsu.edu
WEBSITE: http://europe.sdsu.edu
Faculty
Emeritus: Benkov, Cornwell, Lyman-Hager, Sacco, Schorr, Shapovalov, Wauchope
Chair: Donadey (Interim)
Professors: Clò, Donadey
Associate Professors: Matthews, Rebien
Assistant Professor: Benaglia

## Offered by the Department

Major in European studies with the B.A. degree in liberal arts and sciences.
Major in Russian and Central European studies with the
B.A. degree in liberal arts and sciences.

Minor in European studies.

## The Majors

European Studies. The establishment of a unified European economic community, contested borders in central and eastern Europe, gender and immigration issues in the European Union, the reconciliation of national identity with European integration for students with an interest in these or other topics of international importance, European Studies presents an opportunity to develop an individualized academic program. The European Studies major provides students with interdisciplinary study of the contemporary cultures of modern Europe and extensive preparation in a modern European language. The major requires a core of European Studies courses which address the themes and issues of modern Europe: the new political reality of a united Europe, the recent developments in Central and Eastern Europe, and the tasks of understanding how Europeans relate to themselves and to the rest of the world in today's global village. Because language proficiency plays a pivotal role in intercultural and social understanding, the study of languages is an integral part of the degree. Students will attain an advanced level of proficiency in a modern European language (to be selected from French, German, Italian, Portuguese, Russian, or Spanish) and select from courses offered in a variety of programs on campus and abroad which contribute to the interdisciplinary study of contemporary European culture. Reaching beyond traditional linguistic and historical approaches to the subject, this program challenges majors to develop critical, focused, interdisciplinary understandings of European themes and issues. The European Studies major prepares students for a variety of careers in diplomacy, with government agencies, or in European-centered commerce, communication, arts or the travel industry. Students also have the option of pursuing a double major in a second European language area study. Finally, with some carefully chosen additional coursework outside the major, graduate study in any of the major's disciplines is an option.

Russian and Central European Studies. The goals of the Russian and Central European studies major are to promote the study of Russia, New States of Eurasia, and Eastern Europe within an integrated framework, and to build better understanding of the societies and cultures of this part of the world through the exchange of students, faculty and publications.

Recent revolutionary advances in transportation and communications produced by science and technology are effectively "shrinking" the world. At the present time the United States, Russia, and the New States of Eurasia are in the process of expanding their commercial and cultural ties, opening unprecedented opportunities in government service, journalism, library work, and international business.

For those who continue graduate work after completing the bachelor's degree, Russian and Central European studies is a good preparatory curriculum for graduate professional programs in international trade, international law, librarianship, education, public administration, and journalism.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Impacted Program

The European studies and Russian and Central European studies majors are impacted programs. To be admitted to the European studies or Russian and Central European studies major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## European Studies Major

## With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 03101) (SIMS Code: 112501)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A minor is not required with this major.
In order to satisfy degree requirements, students must complete at least one of the language emphases as described below.

Preparation for the Major. (Complete I and II: 25-32 units.)
I. European Studies: (9 units). European Studies 101; and six units selected from History 105, 106, German 150, Russian 110.
II. Foreign Language and Culture: (Select one: 16-23 units.)

French 100A, 100B, 201, 210, 221. (20 units)
German 100A, 100B, 202, 205A, 205B. (21 units)
Italian 100A, 100B, 201, 211, 212. (21 units)
Portuguese 101, 102, 203, 204. (16 units)
Russian 100A, 100B, 110, 200A, 200B. (23 units)
Spanish 101, 102, 201, 202, 211, 212. (22 units)
Language Requirement. The language requirement is automatically fulfilled through coursework for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience Requirement. All European studies majors are required to complete a study abroad program in a European country, consisting of a minimum of six units ( 90 hours). However, European studies majors are strongly encouraged to complete a more extensive abroad experience by participating in a semester or an academic year program. To fulfill the study abroad requirement, European studies majors must enroll in an approved program. Unapproved study abroad programs will not meet the international experience requirement for the major.

Major. (Complete I, II, III, and IV below: 36 units.)
I. European Studies: (12 units). European Studies 301, 501, and six units selected from any 400- or 500 -level European studies courses.
II. National Language and Culture Emphasis: (12 units). Complete one language and culture emphasis:

French 301, 421, 422, and one additional three unit course. German 301, 400, 430, and one additional three unit course. Italian 301, 422, 424, and one additional three unit course.
Portuguese 311 and three additional three unit courses.
Russian 301, 311, 430, and one additional three unit course.
Spanish 301, 340, and Spanish 302 or 381 or 382, and one additional three unit course.
III. European Studies Electives: ( 6 units). Select six units from the following: European Studies 430, 435, 440, 501; Art 559; Geography 336; History 408, 440, 512A, 512B, 527; Humanities 408; Music 408A; Philosophy 506, 508; Political Science 302, 356; Russian 310, 435; Women's Studies 340.
IV. National Culture Electives: (6 units). Courses must be selected from an area other than courses selected for National Language and Culture Emphasis. Select six units from the following: English 544; French 424; German 320; History 418; Humanities 310, 330; Italian 422; Political Science 359; Russian 305A, 305B.

Language Proficiency Exit Examination. Students are required to satisfy the Language Proficiency Exit Examination before graduation. To clear the language proficiency exit requirement, students must achieve a passing score on a language examination approved by the European Studies program. For further information concerning test dates, contact the European Studies office.

## Russian and Central European

## Studies Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 03071) (SIMS Code: 116501)
All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A minor is not required with this major.
Preparation for the Major. Russian 100A, 100B, 110, 200A, 200B. (23 units)

Language Requirement. The language requirement is automatically fulfilled through coursework for preparation for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of $C(2.0)$ or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience Requirement. All Russian and Central European Studies majors are required to complete a study abroad program in Russia or any other Slavic-language speaking country, consisting of a minimum of six units ( 90 hours). However, all majors are strongly encouraged to complete a more extensive abroad experience by participating in a semester or academic year program. To fulfill the study abroad requirement, Russian and Central European Studies majors must enroll in an approved program. Unapproved study abroad programs will not meet the international experience requirement for the major.

Major. A minimum of 27 upper division units to include Humanities 330 or Russian 430, Political Science 356, 359, Russian 301, $310,311,435$, and six units of electives in 400-or 500-level courses in Russian.

## European Studies Minor

(SIMS Code: 112501)
The minor in European studies consists of a minimum of 15 units to include European Studies 101 and 301 and nine additional upper division units from European Studies courses or Humanities 408. Students must also establish proficiency level in a European language other than English by completing one of the courses which satisfies the language graduation requirement or demonstrates equivalent proficiency.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University, including units earned abroad.

## Courses (EUROP)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

EUROP 101. Introduction to European Studies (3) [GE]
Europe: The land, the people, their artistic, intellectual and cultural movements, including art, architecture, languages and literatures.

## EUROP 160. European Reflections on Science

 and Technology (3) [GE]European authors at the intersection of arts, science, and technology. Major innovations and debates across time and place.

## EUROP 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
EUROP 301. Contemporary Europe (3) [GE]
Prerequisite recommended: European Studies 101.
Contemporary Europe, emphasizing artistic, intellectual, and cultural trends, as well as contemporary issues.
EUROP 320. Food Culture in Europe (3) [GE]
Prerequisite recommended: European Studies 101.
Regional distinctions and traditions. Food consumption, distribution, preparation, sourcing, and sustainability.
EUROP 424. European Cinema (3) [GE]
Two lectures and two hours of activity.
Prerequisite recommended: European Studies 101.
Issues and themes in European culture as seen through its films. May be repeated with new title and content. Maximum credit six units.
EUROP 430. Muslim Experience in Europe (3) [GE]
Prerequisite recommended: European Studies 101.
Cross-cultural connections between the Muslim and Judeo-Christian worlds in Europe. Socio-cultural, ethnicity, race, and gender issues from the Middle Ages to the present day, using historical accounts, art works, literature, and film.
EUROP 435. Culture and Identity in Post-Communist
Europe (3) [GE]
Social, economic, and cultural transformations in Europe after the collapse of communism. Daily life under communism and the impact of the collapse of this political system on language, individual identity, space, and community.
EUROP 440. Human Trafficking in Europe (3) [GE]
Human trafficking in context of migration, human rights, society, culture, and gender discourses in Europe. Historical accounts of trafficking, scholarly articles, literature, film, and primary documents from advocacy organizations and governmental institutions.
EUROP 495. European Studies Internship (3) $\mathrm{Cr} / \mathrm{NC}$
Prerequisites: Upper division standing in the major and consent of instructor.

Practical work experience in a field related to European studies. Work done under joint direction of activity sponsor and instructor. Approved international internships may count towards international experience requirement for major.
EUROP 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.
EUROP 499. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

## EUROP 501. European Life and Culture (3)

Prerequisite: Undergraduate: European Studies 301.
Specialized study of topics such as European union, European women, or European art. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.
EUROP 596. Topics in European Studies (3)
Prerequisite: European Studies 301 for majors and minors; upper division standing for all others.

Specialized topics in contemporary European culture. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

# Exercise and Nutritional Sciences 

In the College of Health and Human Services

OFFICE: Exercise and Nutritional Sciences 351
TELEPHONE: 619-594-5541
WEBSITE: https://ens.sdsu.edu
Accredited by the Commission on Accreditation of Athletic Training Education for Athletic Training.

## Faculty

Emeritus: Aufsesser, Carter, Francis, Franz, Friedman, Harris, King, Kolkhorst, LaMaster, Landis, McKenzie, T., Mechikoff, NicholsBernhard, Patterson, Rushall, Selder, Simmons, Sleet, Sucec, Verity, Wells, Williamson
Director: Mahar
Professors: Buono, Enwemeka, Hong, Hooker, Kahan, Kern, Levy, Mahar, Maluf, Rauh
Associate Professors: Baweja, Cannon, Domingo, Gombatto, Hooshmand, Kressler, Lebsack, Tuttle
Assistant Professors: Bhutani, Liu, McClain, O'Connor, Post, Rosenthal
Lecturers: Arellano, Comana, Greicar, Lane, Meredith, Moyer, Prescher, Soto

## Offered by the School

Doctor of Physical Therapy.
Master of Science degree in exercise physiology.
Master of Science degree in kinesiology.
Master of Science degree in nutritional science and Master of Science degree in exercise physiology (concurrent program).
Major in athletic training with the B.S. degree in
applied arts and sciences.
Major in kinesiology with the B.S. degree in applied arts and sciences.
Emphasis in exercise science generalist.
Emphasis in fitness specialist.
Emphasis in prephysical therapy.

## The Major

Athletic Training. The athletic training major is a CAATE accredited undergraduate major. The program leads students to a career in athletic training and eligibility to sit for the Board of Certification athletic training examination. Certified athletic trainers are responsible for the prevention, management, and rehabilitation of athletic and physically active injuries. They work in such diverse areas as high schools, community colleges, universities, sports medicine clinics, corporate/industrial settings, and professional athletics. The athletic training program is comprised of two components of study, a preprofessional program and a professional program. The professional program requires application to the program and includes a clinical education component. The clinical education component is an intensive, hands-on service learning program that provides students with the opportunity to apply psychomotor skills in a real athletic environment under the direct supervision of a certified athletic trainer. Students are given the opportunity to practice what they learn in a variety of clinical education settings included, but not limited to, the Department of Athletics at San Diego State University, University of California, San Diego, University of San Diego, Grossmont Community College, San Diego Mesa Community College, Cuyamaca Community College, San Diego City College, Southwestern Community College, Rancho Bernardo High School, and Cathedral Catholic High School. Due to the required supervision of the clinical education component, there are a limited number of spaces for students in the professional program per year. Therefore, the application process is competitive and based upon a variety of criteria outlined under "Standards for Admission." Students interested in
the athletic training major should meet with the program director as soon as possible in their academic career for the most current information.

Kinesiology. The kinesiology major with emphases in exercise science generalist, fitness specialist, and prephysical therapy presents to students the study of the processes through which individuals obtain optimal health, physical skill, and fitness. The professional, whether in a laboratory, school, medical or business setting, is ultimately concerned with improving the health and well-being of people.

The uniqueness of the academic area known as kinesiology is the study of human movement. The academic foundation for the study of human movement is covered by courses that explore movement as it affects and is affected by physiological, psychological, developmental, sociocultural, and mechanical parameters. Application of movement concepts evolves from an academic foundation and is covered by courses that study how movement is quantified, how learning experiences are sequenced to modify movement behaviors, and how movement is modified for special needs.

## Emphasis in Exercise Science Generalist

Students in the exercise science generalist emphasis often find employment in the private and public sectors concerned with the fitness and health of employees. This emphasis prepares students to meet the academic requirements necessary to (1) evaluate and develop exercise programming for apparently healthy persons in diverse fitness and health settings, and (2) attain certifications that reflect knowledge of the scientific principles that govern leadership in exercise and health enhancement programs. Graduates work as fitness professionals in corporate, community, clinical, and commercial fitness programs. There are also career opportunities for employment in the business sector to include fitness and wellness, and community programs. Graduates in the exercise science generalist emphasis are not as well prepared as those coming from the fitness specialist and may not be as competitive for employment or admission to graduate kinesiology programs.

## Emphasis in Fitness Specialist

Students in the fitness specialist emphasis often find employment in the private and public sectors concerned with the fitness and health of employees. This emphasis prepares students to meet the academic requirements necessary to (1) evaluate and develop exercise programming for apparently healthy persons in diverse fitness and health settings, and (2) attain certifications that reflect knowledge of the scientific principles that govern leadership in exercise and health enhancement programs. Graduates work as fitness professionals in corporate, community, clinical, and commercial fitness programs. There are also career opportunities for employment in the business sector to include fitness and wellness, community programs, cardiac and pulmonary rehabilitation, and clinical research.

## Emphasis in Prephysical Therapy

The prephysical therapy emphasis prepares students to meet the academic requirements necessary for entry to postgraduate education for rehabilitative professions such as physical therapy, chiropractic, occupational therapy, physician assistant, and podiatry. Students find employment in a broad range of medical environments. Students wishing to meet all requirements for postgraduate education for a professional degree should meet with the undergraduate adviser as well as contact potential postgraduate education sites to obtain specific entry requirements.

## Retention Policy

The College of Health and Human Services expects that all athletic training and kinesiology majors will make reasonable academic progress towards the degree. Premajors who have completed major preparatory courses, earned 60 units, but have less than a 2.8 GPA for athletic training or 2.9 GPA for kinesiology may be removed from the premajor and placed in undeclared.

## Standards for Admission

## Admission to the University

Applicants must be eligible for admission to the university. See "Regulations: Admission and Registration" section of this catalog. Once accepted to the university, students interested in the athletic training major are subject to further screening by the School of Exercise and Nutritional Sciences and the athletic training professional program.

## Admission to the Athletic Training or Kinesiology Major

Refer to "Impacted Programs" section of the Exercise and Nutritional Sciences section of this catalog.

## Admission to the Athletic Training Professional Program

The application packet for the athletic training professional program can be obtained from the athletic training advising office or is available on the program website at: http://www-rohan.sdsu. edu/dept/athletic/athletictraining/.

1. Application Deadline. Application for admission is accepted each spring for the following fall. Program applications are due February 1. There is no spring admission cycle.
2. Prerequisite Courses. The following courses, or their equivalents, are required for admission to the athletic training professional program:
BIOL 212 Human Anatomy ........................................................ 4
CHEM 200 General Chemistry ............................................................ 5
ENS 265 Care and Prevention of Athletic and Recreational Injuries... $\qquad$
ENS 265L Care and Prevention of Athletic and Recreational Injuries Laboratory.. . .2
3. Premajor Courses. Students are expected to have most, if not all, of the premajor courses completed by the end of the spring semester in which they apply. This ensures transition into the major and major coursework.
4. Minimum Overall Grade Point Average. Applicants must have a minimum overall grade point average of 2.8 . Please note that having the minimum grade point average does not guarantee admittance.
5. Grade Point Average Requirement. Applicants must have a minimum grade point average of 3.0 in Biology 212, Exercise and Nutritional Sciences 265 and 265L.
6. CPR and First Aid Certification. Students are required to have current CPR as a Health Care Provider through the American Red Cross or as a Professional Rescuer through the American Red Cross. In addition, they must have first aid certification at the time of application, and are expected to maintain current certifications in both CPR and First Aid throughout the time of enrollment in the program.
7. Volunteer Clinical Hours. Prior to program admission, students must obtain a minimum of 60 hours of observational experience in a traditional athletic setting under the supervision of a certified athletic trainer. These settings include athletic settings at a high school, community college, or university. A list of approved settings and locations can be obtained from the athletic training program director.
8. Technical Standards for Admission. All students upon admission to the athletic training professional program must have medical clearance by a physician, nurse practitioner, or physician assistant for the following abilities and expectations. In the event a student is unable to fulfill these technical standards, with or without reasonable accommodation, the student will not be admitted into the program. The Student Disability Services office will evaluate a student who states he/she could meet the program's technical standards with accommodation and confirm that the stated condition qualifies as a disability under applicable laws. If a student states he/she can meet the technical standards with accommodation, the university will determine whether it agrees that the student can meet the technical standards with reasonable accommodation; this includes a review of whether the accommodations requested are reasonable, taking into account whether accommodation should jeopardize clinician/patient safety, or the educational process of the student or the institution, including all coursework, clinical experiences, and internships deemed essential to graduation.
Candidates for selection must demonstrate:
a. The mental capacity to assimilate, analyze, synthesize, integrate concepts and problem solve to formulate assessment and therapeutic judgments and to be able to distinguish deviations from the norm.
b. Sufficient postural and neuromuscular control, sensory function, and coordination to perform CPR, primary and secondary surveys, emergency transport and transfers, appropriate physical examinations, and manual therapeutic exercise procedures; including the safe and efficient use of equipment and materials during the assessment and treatment of patients.
c. The ability to communicate effectively and sensitively with patients and colleagues, including individuals from different cultural and social backgrounds; this includes, but is not limited to, the ability to establish rapport with patients and communicate judgments and treatment information effectively. Students must be able to understand and speak the English language at a level consistent with the competent professional practice.
d. The ability to write effectively as it relates to the discipline.
9. Transfer and Retention. Transfer students should check with the advising offices of the respective institutions for transfer equivalents and admission criteria. Once students are accepted into the athletic training professional program/ major, there is a retention policy that requires students to maintain both academic and clinical standards for continuation in the program. Academically, students must achieve a semester GPA of 2.80 or better each semester enrolled in the professional program and clinically they must obtain a grade of B (3.0) or better in the ENS 389, Practicum in Athletic Training, series coursework or they will be put on academic or clinical probation. Should a student have two semesters of probation, they will be dismissed from the program.
10. Appeal Policy. Should a student have special circumstances that he/she feels should be considered regarding an admission decision or retention decision, there is a formal appeal process that can be applied. Refer to the athletic training policies and procedures manual for a copy of these policies. This manual is available in the athletic training advising office or on the athletic training website.

## Athletic Training Professional Program Expectations

If accepted to the athletic training professional program, the following expectations apply:

1. Become a student member of the National Athletic Trainers' Association within four months of program admittance. Student membership rate is $\$ 125$ per year.
2. Become a member of the Future Athletic Trainers Society within four months of program admittance. Membership rate is $\$ 40$ per year.
3. Obtain Student Professional Liability Insurance by the first start date of clinical placement. Student rate is $\$ 20$ per year.
4. Provide own transportation to off-campus clinical education sites.
5. Be enrolled as a full-time student (at least 12 units), unless special circumstances are approved for part-time enrollment by the program director.
6. Maintain current CPR certification through the American Heart Association (AHA), health care provider course, or American Red Cross (ARC) professional rescuer course.
7. Engage in a clinical education program that averages 20 hours per week at a designated clinical site for a minimum of four semesters. Clinical exposure may commence in early August and might extend into December or January.
8. Adhere to designated policies and procedures for program retention and progression. A copy of the policies and procedures manual is available on the program website or can be obtained from the advising office.

## Impacted Programs

The athletic training major and the kinesiology major with emphases in exercise science generalist, fitness specialist, and prephysical therapy are impacted programs.

To be admitted to the athletic training major or a kinesiology major emphasis, students must meet the following criteria:
a. Complete with a grade of $C(2.0)$ or better: Exercise and Nutritional Sciences 200 and Biology 212. These courses cannot be taken for credit/no credit (Cr/NC). Biology 212 must be completed with a grade of B(3.0) or better for students in the athletic training major;
b. Complete a minimum of 60 semester units applicable to the lower division General Education requirements to include all Preparation for the Major requirements for kinesiology major emphasis, and electives to reach 60 units. Exercise and Nutritional Sciences 200 and Biology 212 must be completed before taking upper division major courses. Preparation for the Major courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
c. Have a cumulative GPA of 2.9 or better in a kinesiology major emphasis.
d. For the athletic training major, have a cumulative GPA of 2.80 or better. This GPA is also required for application submission and program consideration.
e. For the athletic training major, students must be accepted into the professional program.
f. For the athletic training major, complete with a minimum overall grade point average of 3.0: Biology 212, Exercise and Nutritional Sciences 265, 265L. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ).
To complete the major, students must fulfill the degree requirements for the major emphasis described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Athletic Training Major

With the B.S. Degree in Applied Arts and Sciences
(Major Code: 08375) (SIMS Code: 556522)
All candidates for a degree in applied arts and sciences must complete the requirements listed in the section of this catalog on "Graduation Requirements."

Acceptance into the athletic training professional program is required for major status. Application to the program is competitive and limited in number. Applications are due February 1. Those students interested in the athletic training program should contact the athletic training program director.

Preparation for the Major. Exercise and Nutritional Sciences 200, 265, 265L; Biology 203, 203L, 212; Chemistry 200; Nutrition 201; Psychology 101, 260; Sociology 101; and one of the following: Biology 215, Economics 201, Psychology 280, Sociology 201, Statistics 119. (34 units)

Preparation for the Major courses cannot be taken for credit/ no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). Exercise and Nutritional Sciences 200 must be completed with a grade of C (2.0) or better. Exercise and Nutritional Sciences 265, 265L, and Biology 212 must have a minimum overall grade point average of 3.0. Biology 212 must be completed with a grade of $B(3.0)$ or better.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. Athletic training majors are required to participate in a pre-approved international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course will be substituted). Specific details can be found on the college website at http://www.chhs.sdsu.edu/international.

To meet the international experience requirement, majors must complete one of the following:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;

OR
5. One course selected from:

- Health and Human Services 290 or 350;
- Asian Studies 490;
- Education 450;
- General Studies 450;
- International Security and Conflict Resolution 450;
- Latin American Studies 320, 450, or 550;
- Political Science 450;
- Public Health 550;
- Science 350.

Major. A minimum of 53 upper division units to include Exercise and Nutritional Sciences 303, 304, 304L, 305, 306, 307, 332, 333, 365, 367, 367L, 368, 368L, 389A, 389B, 389C, 389D, 401A, $434,438,463,463 \mathrm{~L}, 465,466$; Biology 336. Biology 336 will also satisfy three units of the General Education requirement in IV.A. Recommended: Students should take Sociology 355 to satisfy the General Education requirement in IV.B.

## Kinesiology Major

With the B.S. Degree in Applied Arts and Sciences

## (Major Code: 08351)

All candidates for a degree in applied arts and sciences must complete the requirements listed in the section of this catalog on "Graduation Requirements."

Preparation for the Major courses cannot be taken for credit/no credit (Cr/NC). Exercise and Nutritional Sciences 200 and Biology 212 must be completed with a grade of $C$ (2.0) or better.

## Emphasis in Exercise Science Generalist

(SIMS Code: 556526)

## Open only to AA-T/TMC for Kinesiology

Preparation for the Major. The emphasis in exercise science generalist is open only to students who have completed the California Community College Associate in Arts in Kinesiology for Transfer (AA-T) degree completing the Transfer Model Curriculum (TMC) for Kinesiology. Students must complete the following courses as part of the TMC or at SDSU: Exercise and Nutritional Sciences 265; Nutrition 201; Chemistry 100, 102, or 200; Statistics 119. (5-13 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. All kinesiology majors are required to participate in a pre-approved international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course will be substituted). Specific details can be found on the college website at http://www.chhs.sdsu.edu/international.

To meet the international experience requirement, majors must complete one of the following:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;

OR
5. One course selected from:

- Health and Human Services 290 or 350;
- Asian Studies 490;
- Education 450;
- General Studies 450;
- International Security and Conflict Resolution 450;
- Latin American Studies 320, 450, or 550;
- Political Science 450;
- Public Health 550;
- Science 350.

Students must complete nine upper division units from General Education Explorations of Human Experience.

Major. A minimum of 40 upper division units to include Exercise and Nutritional Sciences 303, 304, 304L, 305, 306, 307, 332, 333, 388A (one unit) or 388B (one unit), 401B, 432, 432L, 433, 434, 439, 440; Health and Human Services 350. Health and Human Services 350 will satisfy three units of the General Education requirement IV.B. Communication 321 is recommended, if needed, for students to complete their 60 unit requirement at SDSU.

## Emphasis in Fitness Specialist

(SIMS Code: 556524)
Preparation for the Major. Exercise and Nutritional Sciences 200, 265; Biology 100, 100L, 212; Chemistry 100; Communication 103; Gerontology 101; Nutrition 201; Psychology 101; Sociology 101; and one of the following: Biology 215, Economics 201, Psychology 280, Sociology 201, Statistics 119. (35 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. All kinesiology majors are required to participate in a pre-approved international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course will be substituted). Specific details can be found on the college website at http://www.chhs.sdsu.edu/international.

To meet the international experience requirement, majors must complete one of the following:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;

OR
5. One course selected from:

- Health and Human Services 290 or 350;
- Asian Studies 490;
- Education 450;
- General Studies 450;
- International Security and Conflict Resolution 450;
- Latin American Studies 320, 450, or 550;
- Political Science 450;
- Public Health 550;
- Science 350.

Major. A minimum of 49 upper division units to include Exercise and Nutritional Sciences 303, 304, 304L, 305, 306, 307, 332, 333, 388A (one unit) or 388B (one unit), 401B, 432, 432L, 433, 434, 438, 439, 440; Biology 336; Communication 321; Gerontology 310. Biology 336 will also satisfy three units of the General Education requirement in IV.A. Recommended: Students should take Health and Human Services 350 to satisfy the General Education requirement in IV.B.

## Emphasis in Prephysical Therapy

(SIMS Code: 556511)
Students interested in applying to postgraduate allied health programs are advised to follow the prephysical therapy emphasis. It should be noted that required courses attempt to prepare individuals for graduate application, however specific course requirements and admission standards may vary for each graduate school.

Preparation for the Major. Exercise and Nutritional Sciences 200, 265; Biology 203, 203L, 211, 211L, 212; Chemistry 200, 201; Communication 103; Nutrition 201; Physics 180A and 180B, 182A and 182B; Psychology 101; Sociology 101; and one of the following: Biology 215, Economics 201, Psychology 280, Sociology 201, Statistics 119. (50 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of $C(2.0)$ or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. All kinesiology majors are required to participate in a pre-approved international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course will be substituted). Specific details can be found on the college website at http://www.chhs.sdsu.edu/international.

To meet the international experience requirement, majors must complete one of the following:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;

OR
5. One course selected from:

- Health and Human Services 290 or 350 ;
- Asian Studies 490;
- Education 450;
- General Studies 450;
- International Security and Conflict Resolution 450;
- Latin American Studies 320, 450, or 550;
- Political Science 450;
- Public Health 550;
- Science 350.

Major. A minimum of 39 upper division units to include Exercise and Nutritional Sciences 303, 304, 304L, 305, 306, 307, 332, 333, 388A (one unit) or 388B (one unit), 434, 438; Biology 336, 436; Communication 321; Psychology 350. Biology 336 will also satisfy three units of the General Education requirement in IV.A. Recommended: Students should take Health and Human Services 350 to satisfy the General Education requirement in IV.B. Students should take Exercise and Nutritional Sciences 466 to learn more about clinical pathology of general medical conditions.

## Types of Activity Courses

The department offers a wide variety of physical activity courses ranging from adapted physical education through intermediate level classes. The purpose of the physical activity program is to:

1. Provide quality physical activity skill instruction at the beginning and intermediate levels in a wide variety of sport and dance activities.
2. Provide a vehicle for vigorous physical activity in an instructional setting.
3. Provide knowledge about various sport and dance activities.
4. Provide knowledge about the value of physical activity as it relates to an improved quality of life.
5. Provide opportunity for physical activity instruction to all segments of the student population, including those with temporary or permanent disabilities.

## Courses (ENS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

Courses offered for one unit credit meet two hours per week or equivalent.

Dance activity courses: Yoga for Dancers, Beginning Modern Dance. Refer to Dance 100 course in this section of the catalog.

## ENS 104A-104B. Weight Training (1-1)

ENS 108A-108B. Basketball (1-1)
(Exercise and Nutritional Sciences 108A formerly numbered Exercise and Nutritional Sciences 108.)
ENS 109A-109B-109C. Soccer (1-1-1)
ENS 110A-110B. Volleyball (1-1)
(Exercise and Nutritional Sciences 110A formerly numbered Exercise and Nutritional Sciences 110.)
ENS 116A-116B. Golf (1-1)
ENS 118A-118B. Tennis (1-1)
ENS 119A-119B. Bowling (1-1)
ENS 122. Mission Bay Aquatic Center Selected Activities (1) Two hours of activity.
May be repeated with new activity. See Class Schedule for specific content. Maximum credit 10 units.
ENS 138. Selected Activities (1)
May be repeated with new activity for additional credit. See Class Schedule for specific content.

## ENS 139A. Beginning Rock Climbing (1)

Two hours of activity.
Rock climbing concepts and theories. Active participation using beginning techniques and training concepts.

## ENS 139B. Intermediate Rock Climbing (1)

Two hours of activity.
Prerequisite: Exercise and Nutritional Sciences 139A.
Rock climbing concepts and theories. Active participation using advanced techniques, training concepts, and lead climbing concepts expected.

ENS 200. Introduction to Exercise and Nutritional Sciences (3)
Overview of disciplines of kinesiology and foods and nutrition. Current and emerging issues, ethical considerations, and professional practice.
ENS 241A. Physical Education of Children-Theory (1)
Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 241B.

Physical education of elementary school-aged children: Theoretical and scientific bases. Not open to kinesiology majors.
ENS 241B. Physical Education of Children-Activities (1)
Two hours of activity.
Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 241A.

Physical education of elementary school-aged children: Activities and instruction. Not open to kinesiology majors.
ENS 265. Care and Prevention of Athletic and Recreational Injuries (2)
Prerequisites: Premajor in kinesiology. Recommended: Credit or concurrent registration in Biology 212.

Mechanisms of common sports injuries, acute care of injuries, risk management and prevention of injuries, psychosocial intervention and referral, and basic health care administration.
ENS 265L. Care and Prevention of Athletic and Recreational Injuries Laboratory (1)
Three hours of laboratory.
Prerequisites: Premajor in kinesiology. Concurrent registration in Exercise and Nutritional Sciences 265.
ENS 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## ENS 299. Special Study (1-3)

Prerequisites: Consent of School of Exercise and Nutritional Sciences director and instructor.

Individual study.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
ENS 303. Applied Kinesiology (3)
Prerequisites: Grade of $C(2.0)$ or better in Biology 212; credit or concurrent registration in Exercise and Nutritional Sciences 200 or Dance 181; or completion of Associate of Arts in Kinesiology for Transfer (AA-T) degree and Transfer Model Curriculum (TMC) for Kinesiology. Limited to kinesiology, exercise physiology, nutritional sciences, foods and nutrition, dance majors; premajors in kinesiology, foods and nutrition. Major Codes: 08351, 08355, 08356, 10081, 13061.

Arthrology, syndesmology and myology, with emphasis on movement analysis. Muscle groups and their functional relationships. Application of simple mechanical principles to movement analysis.

## ENS 304. Physiology of Exercise (3)

Prerequisites: Grade of $C$ (2.0) or better in Biology 336 or completion of Associate of Arts in Kinesiology for Transfer (AA-T) degree and Transfer Model Curriculum (TMC) for Kinesiology. Limited to undergraduate majors in kinesiology, foods and nutrition; graduate degrees in exercise physiology, nutritional sciences, and the dual degree in nutritional sciences and exercise physiology. Major Codes: 08351, 08355, 08356, 13061.

Effects of physical activities on physiological functions of the body.
ENS 304L. Exercise Physiology Laboratory (1)
Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Exercise and Nutritional Sciences 304.

Laboratory experiences in the application of exercises and the analysis of the results.

ENS 305. Measurement and Evaluation in Kinesiology (3)
Prerequisites: One of the following: Biology 215, Economics 201, Psychology 280, Sociology 201, Statistics 119; or completion of Associate of Arts in Kinesiology for Transfer (AA-T) degree and Transfer Model Curriculum (TMC) for Kinesiology. Limited to kinesiology majors. Major Code: 08351.

Testing and measurement for assessment and understanding of physical performance and for planning and evaluation of instruction in physical activity settings. Planning, implementation, and evaluation of tests.

## ENS 306. Biomechanics of Human Movement (3)

Prerequisites: Credit or concurrent registration in Exercise and Nutritional Sciences 303. Limited to kinesiology majors. Major Code: 08351.

Mechanical principles as applied to movement; analysis and application to selected motor skills.

## ENS 307. Motor Learning and Performance (3)

Prerequisites: Psychology 101 and one of the following: Biology 215, Economics 201, Psychology 280, Sociology 201, Statistics 119; or completion of Associate of Arts in Kinesiology for Transfer (AA-T) degree and Transfer Model Curriculum (TMC) for Kinesiology. Limited to kinesiology majors. Major Code: 08351.

Psychological parameters related to physical performance and the acquisition of motor skills.
ENS 318. Sport, Games, and Culture (3) [GE]
Prerequisite: Sociology 101.
Contemporary games and sports. Anthro-historical development of sports and philosophies, political economies, and socio-cultural influences. Psychological performance modalities of modern sport.
ENS 330. Exercise and Wellness Across the Lifespan (3) [GE]
Role of physical activity and exercise behavior in health and wellness. Personal applications plus gender and cultural implications of physical activity from childhood through adulthood.
ENS 331. Exercise and Nutrition for Health, Fitness, and Performance (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning.

Exercise, physical activity and nutrition information, guidelines, and misinformation. Effects of exercise and nutrition on disease prevention. Personal health, fitness, and performance goals.
ENS 332. Pathophysiology and Exercise Programming of Disease Populations I (3)
Prerequisites: Exercise and Nutritional Sciences 304 and concurrent registration in Exercise and Nutritional Sciences 333.

Pathophysiology of musculoskeletal, neuromuscular, and cognitive/psychosocial disorders. Develop exercise programs through recommended guidelines.
ENS 333. Pathophysiology and Exercise Programming of Disease Populations II (2)
Prerequisites: Exercise and Nutritional Sciences 304 and concurrent registration in Exercise and Nutritional Sciences 332.

Pathophysiology of pulmonary, cancer, and immune-related disorders. Develop exercise programs through recommended guidelines.

## ENS 365. Scientific Management of Sports Injuries (3)

Prerequisite: Credit or concurrent registration in Exercise and Nutritional Sciences 306.

Scientific basis of injury dysfunction and tissue healing. Application of these principles to the use of therapeutic modalities for injury management.
ENS 367. Clinical Evaluation of Sports Injuries Part I (2)
Prerequisites: Credit or concurrent registration in Exercise and Nutritional Sciences 303 and 389A.

Theory of clinical evaluation of sports injuries techniques and scientific basis of techniques. Principles of systematic differential evaluation of upper extremity, cervical spine.

ENS 367L. Clinical Evaluation of Sports Injuries Part I (1)
Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 367.

Practical experience in clinical evaluation of sports injuries techniques and scientific basis of techniques. Principles of systematic differential evaluation of upper extremity, cervical spine.

## ENS 368. Clinical Evaluation of Sports Injury Part II (2)

Prerequisites: Exercise and Nutritional Sciences 367 and 367L. Credit or concurrent registration in Exercise and Nutritional Sciences 368L.

Theory of clinical evaluation of sports injury techniques and scientific basis of techniques. Systematic differential evaluation process applied to lower extremities, thoracic, and lumbar spine and chest and abdominal injuries.

## ENS 368L. Clinical Evaluation of Sports Injury Part II (1)

Prerequisites: Exercise and Nutritional Sciences 367 and 367L. Concurrent registration in Exercise and Nutritional Sciences 368.

Practical experience in clinical evaluation of sports injuries techniques and scientific basis of techniques. Principles of systematic differential evaluation process applied to lower extremities, thoracic and lumbar spine and chest and abdominal injuries.

## ENS 388A. Rehabilitation Laboratory SDSU Fitness Clinic (1-4)

Three hours of laboratory per unit.
Prerequisites: Senior standing and consent of instructor.
Hands-on experience working with individuals with a variety of physical and neurological disabilities through prescribed fitness programming at San Diego State University. Maximum credit four units.

## ENS 388B. Community Rehabilitation Laboratory (1)

Three hours of laboratory.
Prerequisite: Consent of instructor.
Hands-on experience working with individuals with a variety of physical and neurological disabilities in the San Diego community.

## ENS 389A-389B-389C-389D. Practicum in Athletic

## Training (1-1-1-1)

389A, 389B, 389C, 389D: Two hours of activity.
Prerequisites: 389A: Grade of B (3.0) or better in Biology 212, Exercise and Nutritional Sciences 265, 265L, application, letters of recommendation, and interview.

389B: Grade of $B$ (3.0) or better in Exercise and Nutritional Sciences 389A.
389C: Grade of $B$ (3.0) or better in Exercise and Nutritional Sciences 389B.
389D: Grade of $B$ (3.0) or better in Exercise and Nutritional Sciences 389C.
Practical training and clinical applications of basic and advanced techniques of athletic training. Emergency, preventative procedures treatment, and rehabilitation techniques to be performed in actual athletic training settings. Practicum experience offered in conjunction with clinical internship.

## ENS 397. Contemporary Topics in Kinesiology

(Credit to be arranged) $\mathrm{Cr} / \mathrm{NC}$
(Offered only through SDSU Global Campus)
Prerequisites: Consent of instructor; bachelor's degree.
Study of specially selected problems in physical education and sport. Does not apply to undergraduate degrees or credentials.

## ENS 401A. Musculo-Skeletal Fitness (1)

Prerequisites: Exercise and Nutritional Sciences 304, 304L, 306.
Training techniques in areas of strength and flexibility. Examination of facilities and equipment, mechanics of strength and flexibility techniques, development of training program, basic physiology and review of current research in areas of strength and flexibility.

## ENS 401B. Musculo-Skeletal Fitness Activity (1)

Two hours of activity.
Prerequisites: Exercise and Nutritional Sciences 304, 304L, 306.
Circulorespiratory endurance, muscular strength and endurance, selection and care of equipment and facilities, and programs in the areas of flexibility, weight training and aerobics.

ENS 432. Exercise, Fitness, and Health (2)
Prerequisites: Exercise and Nutritional Sciences 303, 304, 304L, 305. Concurrent registration in Exercise and Nutritional Sciences 432L.

Exercise testing, programming and leadership for healthy persons of different ages, capacities, and needs.
ENS 432L. Exercise, Fitness, and Health (1)
Three hours of laboratory.
Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 432.

Practicum in exercise testing, programming and leadership for healthy persons of different capacities, and needs.
ENS 433. Exercise, Physical Activity, and Aging (3)
Prerequisite: Exercise and Nutritional Sciences 304.
Relationships between exercise, physical activity, and human aging including physiological, psychological, sociological, health and program considerations. Aging is viewed developmentally with emphasis on the middle and later years.
ENS 434. Promoting Physical Activity and Healthy Eating (3)
Prerequisite: Upper division standing.
Theoretical frameworks for integrating physical activity and nutrition in developing, implementing, and evaluating multicomponent interventions to increase these behaviors in a variety of population subgroups.
ENS 438. Psychosocial Aspects of Disease and Injury Rehabilitation (3)
Prerequisite: Exercise and Nutritional Sciences 388A, 388B, or 389A.

Psychosocial factors related to disease and injury and effects on treatment and rehabilitation processes. Theoretical mechanisms through which psychosocial factors are affected by and influence disease, injury, and treatment and rehabilitation outcomes.
ENS 439. Instructional Leadership in Health and Clinical Settings (2)
Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 440.

Andragogical and pedagogical theories, concepts, and techniques for enhancing instructional effectiveness and learning in exercise, physical activity, and rehabilitation settings.

## ENS 440. Fitness Practitioner Internship (3)

Six hours of activity.
Prerequisites: Credit or concurrent registration in Exercise and Nutritional Sciences 432, 432L, 433. Concurrent registration in Exercise and Nutritional Sciences 439.

Supervised practical experience in developing and applying exercise programs and/or physical activity for apparently healthy persons and persons with clinical conditions in community, corporate, commercial, or medically supervised exercise settings.
ENS 463. Principles and Techniques in Therapeutic Exercise (2) Prerequisites: Exercise and Nutritional Sciences 365 and 389A. Design and application of therapeutic exercise programs for athletic injuries.
ENS 463L. Principles and Techniques in Therapeutic Exercise Laboratory (1)
Three hours of laboratory.
Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 463.

## ENS 465. Seminar in Organization and Administration in

 Athletic Training (3)Prerequisite: Exercise and Nutritional Sciences 389A.
Professional issues in athletic training discipline, including topics in organization and administration.
ENS 466. Clinical Pathology of General Medical Conditions (3)
Clinical pathology associated with body systems, clinical recognition, management, and referral of non-orthopedic pathologies associated with physically active persons.

## ENS 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## ENS 499. Special Study (1-3)

Prerequisites: Consent of school director. Limited to kinesiology majors. Major Code: 08351.

Individual study. Maximum credit six units.

## UPPER DIVISION COURSE

## (Also Acceptable for Advanced Degrees)

ENS 596. Selected Topics in Exercise and Nutritional Sciences (1-3)
Selected topics in exercise and nutritional sciences. May be repeated with new content and approval of instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

OFFICE: Storm Hall West 214
TELEPHONE: 619-594-4877 / FAX: 619-594-4877
WEBSITE: http://filipino.sdsu.edu

## Faculty

Chair: Samraj
Lecturer: Alicio
Offered by the Department of Linguistics and

## Asian/Middle Eastern Languages

Courses in Filipino.
Major or minor work in Filipino is not offered.

## Language Requirement for the <br> B.A. Degree in Liberal Arts and Sciences

Students electing the study of Filipino to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Filipino 201 or the equivalent level of achievement. The usual sequence of coursework is Filipino 101, 102, and 201. Refer to section of catalog on "Graduation Requirements" for additional ways to satisfy competency.

## High School Equivalents

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:

1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters, thus fulfilling the language requirement.

## Courses (FILIP)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

Native speakers of Filipino will not receive credit for taking lower division courses in Filipino except with advance approval from the department.

No credit will be given for Filipino 101, 102, 201 taken out of sequence.

## FILIP 101. Elementary Filipino I (4) [GE]

Introduction to Filipino (Tagalog), with emphasis on everyday conversation. Focus on essentials of grammar and sufficient vocabulary for speaking and reading Filipino.

## FILIP 102. Elementary Filipino II (4) [GE]

Prerequisite: Filipino 101.
Continuation of Filipino 101 with focus on grammar and oral proficiency. Emphasis on grammatical accuracy by responding orally to spoken and written inquiries. Not open to students with credit in Filipino 201.

## FILIP 201. Intermediate Filipino (4) [GE]

Prerequisite: Filipino 102.
Extensive review of all structures learned in Filipino 101 and 102. Integrated approach to learning Filipino by offering opportunities to acquire communicative skills while developing awareness and appreciation of the Filipino culture.

## UPPER DIVISION COURSE

## (Intended for Undergraduates)

FILIP 460. Contemporary Issues in Filipino-American
Communities (3) [GE-ES]
(Same course as Asian Studies 460)
Prerequisite: Upper division standing.
History of Philippines and Filipino immigration to US. Current issues in Filipino American communities to include labor, health, gender and sexuality, race relations, family culture and parenting, youth and the elderly, ethnic identity and empowerment.

## Finance

In the Fowler College of Business

OFFICE: Student Services East 3428
TELEPHONE: 619-594-5323 / FAX: 619-594-3272
WEBSITE: https://business.sdsu.edu/finance
A member of AACSB International-The Association to Advance Collegiate Schools of Business.

The Personal Financial Planning Certificate is registered with the Certified Financial Planner Board of Standards, Inc.

## Faculty

Emeritus: Badrinath, Block, Bost, Cherin, Gitman, Graf, Hippaka, Houston, Nye, Omberg, Reints, Sachdeva, Salehizadeh, Short, Song, Sterk, Vandenberg, Warschauer, Wilbur
Chair: Haddad
Professors: Do, Ely, Haddad, Kim, Varaiya
Associate Professors: Gubellini, Juneja, Lachance, Tang
Assistant Professors: Brincks, Lotfaliei, Mehrotra, Pierzak, Smith, Xi

## Offered by the Department

Master of Science degree in business administration.
Master of Business Administration.
Major in finance with the B.S. degree in business administration.
Major in financial services with the B.S. degree
in business administration.
Major in real estate with the B.S. degree
in business administration.
Major in general business with the B.S. degree
in business administration. See Business Administration.
Minor in finance.
Minor in real estate.
Certificate in executive financial planner, advanced
(refer to the Graduate Bulletin).
Certificate in personal financial planning.

## The Majors

The Department of Finance offers three majors: Finance, Financial Services, and Real Estate.

Finance. All forms of human endeavor involve finance to some degree. Within our economic system, finance is concerned with capital, which is money or property owned or used in business. Finance majors study both the sources and the uses of capital. The finance curriculum revolves around the valuation process in a free market system. Once an individual or company can value various alternatives, the allocation of resources and the decision process in business becomes much simpler.

Students who are interested in business should have a thorough understanding of the financial process. Upon graduation, students accept a wide variety of positions with business in general. The curriculum of the finance major is designed to give the student breadth in a variety of fields in addition to finance and business.

Employment prospects for graduates with finance majors are very good and forecasts remain encouraging. Graduates are typically found in six types of employment: large and small industrial firms (manufacturers of automobiles, steel, household appliances, and electronic equipment); service oriented firms (electric power, real estate and retail firms); financial institutions (banks, state and federally chartered savings and loan associations, and insurance companies); nonprofit enterprises (universities, labor unions, and foundations); and private businesses.

The diversity of entry level positions obtained by finance majors makes it difficult to describe a typical position. A major in finance does not limit career potential to banking or to any single area of business. A large number of individuals go to work for industrial companies in a variety of entry level positions that allow them to develop into top decision-making positions with those companies. A significant number of chief executive officers and other top officers of corporations have followed the "finance path" to the top.

Financial Services. Although the financial services major is based on many of the same analytical skills and theoretical foundations as the finance major, it is designed specifically to prepare students for careers in one of the segments of the financial services industry: securities, banking, insurance, real estate finance and personal financial planning. It is very common for single firms to own subsidiaries in each of these areas, so it is important for graduates entering these fields to be familiar with all aspects of these important financial sectors.

Graduates can look forward to analytical, managerial or sales careers in the financial services industry. Sales careers include insurance and securities sales. Analytical careers include loan and security analysis and personal financial planning. Managerial careers include management in each of the component industries.

Real Estate. The vision of the real estate program at SDSU is to create a ready-day-one educational program for students who aspire to become future leaders and professionals within the multifaceted real estate industry. This vision and the changing nature of today's real estate market require that graduates receive a complete education that provides both breadth and depth in this field. Majors in real estate receive a solid foundation in business and real estate through required courses and depth in a particular sub-profession through one of three specialty tracks: real estate development, mortgage banking, and real estate investment advising. Graduates will also be prepared to continue learning, develop leadership, and contribute to communities as a result of their total degree program experience.

SDSU's program in real estate provides students with analytical skills, technical competence to perform market analyses, and an understanding of the tools necessary to perform in today's complex real estate industry. This means each graduate from the real estate program should be able to join any real estate organization and make an impact/contribution from their first day of employment. Graduates should be capable of making a wide variety of management decisions concerning real estate including the ability to apply new economic concepts and up-to-date analytical tools to the process of real estate decision making. This is in addition to the conventional knowledge required for a license.

Real estate is one of the most dynamic business sectors and largest asset classes in the economy. It is in the midst of a transition from being primarily locally based to being integrated into the national and global economies. Important public and private decisions must be made every day about the use, management, and disposition of vast real estate resources. This, and the changing nature of the financial environment in which real estate markets operate, has created demand for new real estate experts, people not only with basic real estate training, but also with good general business and financial skills. This means that job opportunities for the real estate major are available in a wide variety of areas even in times of economic uncertainty. Jobs are found in areas such as development, financing, brokerage, property and asset management, valuation, market analysis, and corporate real estate. SDSU's real estate program recognizes this changing real estate environment and prepares majors for these diverse opportunities. It is the goal of the real estate program at SDSU to provide a high level of education, and thus prepare its graduates for job opportunities in a variety of organizations, large and small, public and private.

## Business Honors Program

The Business Honors Program offers excellent upper division business students the opportunity to explore issues in our local, regional, and global business environments focusing on the social and ethical responsibility that business has to the community and society. Honors students will enroll in a one unit business honors seminar each semester. During their enrollment they will participate in activities to promote their academic and personal growth, documenting their work in a written portfolio.

Generally, students should apply to this program at the time of application to upper division business. Applicants must submit an essay with their application. Applicants must have a 3.6 cumulative GPA or good standing in the Weber Honors College. Students not meeting these requirements may petition for admission to the program. Successful completion of the Business Honors Program will be recognized at graduation. Contact Dr. Robert A. Judge, Department of Management Information Systems, for more information about this program.

## Statement on Computers

Before enrolling in upper division courses in the Fowler College of Business, students must be competent in the operation of personal computers, including word processing and spreadsheets. Business students are strongly encouraged to have their own computers capable of running word processing, spreadsheet, presentation, e-mail, and Internet applications such as those found in packages sold by major software publishers. Availability of on-campus computing resources can be limited due to increasing demand across the University.

## Retention Policy

The Fowler College of Business expects that all business students will make reasonable academic progress towards the degree. Business premajors who have earned 60 units but have less than a 2.9 may be removed from the premajors and placed in undeclared. Upper division business majors earning less than a 2.0 average in their major GPA for two consecutive semesters may be removed from business and placed in undeclared.

## Transfer Credit

Lower Division: Courses clearly equivalent in scope and content to San Diego State University courses required for minors or as preparation for all business majors will be accepted from regionally accredited United States institutions and from foreign institutions recognized by San Diego State University and the Fowler College of Business.

Upper Division: It is the policy of the San Diego State University Fowler College of Business to accept upper division transfer credits where (a) the course content, requirements, and level are equivalent to San Diego State University courses and (b) where the course was taught in an AACSB International-The Association to Advance Collegiate Schools of Business accredited program. Exceptions require thorough documentation evidencing the above standards.

## Impacted Program

The majors in the Department of Finance are impacted. Before enrolling in any upper division courses in business administration, students must advance to an upper division business major and obtain a business major code. To be admitted to an upper division business major (accounting, finance, financial services, real estate, information systems, management, or marketing), students must meet the following criteria:
a. Complete with a grade of $C$ (2.0) or better: Accountancy 201, 202; Economics 101, 102; Finance 240 (or an approved business law course); Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290 (RWS 290 is not required for the accounting major); and either Statistics 119 or Economics 201. These courses cannot be taken for credit/no credit (Cr/ NC );
b. Complete a minimum of 60 transferable semester units;
c. Have a cumulative GPA of 2.9.

Students who meet all requirements except the GPA may request to be placed on the waiting list. Students on the waiting list will be admitted on space-availability basis only. Contact the Fowler Center for Student Success (EBA-448), 619-594-5828, for more information.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Finance Major

With the B.S. Degree in Business Administration

## (Major Code: 05041) (SIMS Code: 222115)

A minor is not required with this major.
Preparation for the Major. Complete with a grade of C (2.0) or better: Finance 240 (or an approved business law course); Accountancy 201, 202; Economics 101, 102; Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290; and either Statistics 119 or Economics 201. (27 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$; the minimum grade in each class is C. Additional progress requirements must be met before a student is admitted to an upper division major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. Forty-six upper division units consisting of Finance 321, 325, 327, 329, 423; Accountancy 325, 326; Business Administration 300, 310, 323, 350, 360, 370; and nine units of 300- to 500level finance courses. A "C" (2.0) average or better is required in the courses stipulated here for the major.

## Financial Services Major

With the B.S. Degree in Business Administration
(Major Code: 05043) (SIMS Code: 222122)
The Financial Services major is open to all students, including students who have completed the California Community College Associate in Science in Business for Transfer (AS-T) degree completing the Transfer Model Curriculum (TMC) for business.

A minor is not required with this major.
Preparation for the Major. Complete with a grade of $C$ (2.0) or better: Finance 240 (or an approved business law course); Accountancy 201, 202; Economics 101, 102; Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290; and either Statistics 119 or Economics 201. (27 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$; the minimum grade in each class is $C$. Additional progress requirements must be met before a student is admitted to an upper division major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. Forty-one to 42 upper division units consisting of Finance 327, 331, 522, 589, 590; Accountancy 503; Business Administration 300, 310, 323, 350, 360, 370; and nine to 10 units selected from Finance 326, 421, 427, 431, 435, 585; Accountancy 326; Economics 320 or 422, 490; and Marketing 377. A "C" (2.0) average or better is required in the courses stipulated here for the major.

## Real Estate Major

With the B.S. Degree in Business Administration
(Major Code: 05111) (SIMS Code: 222192)
A minor is not required with this major.
Preparation for the Major. Complete with a grade of $C$ (2.0) or better: Finance 240 (or an approved business law course); Accountancy 201, 202; Economics 101, 102; Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290; and either Statistics 119 or Economics 201. (27 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$; the minimum grade in each class is $C$. Additional progress requirements must be met before a student is admitted to an upper division major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of $C(2.0)$ or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. Forty-seven upper division units consisting of Finance 331, 333, 431, 433, 435, 437; Accountancy 326; Business Administration 300, 310, 323, 350, 360, 370. Twelve units selected from finance courses numbered 300-599 or Management Information Systems 301. A "C" (2.0) average or better is required in the courses stipulated here for the major.

## Finance Minor

## (Minor Code: 05041) (SIMS Code: 222116)

Admission to the minor in finance requires completion of at least 60 units with a minimum overall GPA of 2.9 and completion of Accountancy 201 and Statistics 119 with grades of $C$ (2.0) or better.

The minor in finance consists of a minimum of 18-21 units to include Finance 321, 326, 327, 329; Accountancy 201; Business Administration 323*; and Statistics 119 or Economics 201.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University. Students with a major in the Fowler College of Business, Hospitality and Tourism Management, or International Business should choose courses carefully with an adviser in their major department and the Fowler Center for Student Success (EBA-448).

Students must meet the prerequisites for the minor in effect at the time that they declare the minor. Contact the Fowler Center for Student Success (EBA-448) for admissions criteria and procedures.

> *Business Administration 323 waived for Fowler College of Business, Hospitality and Tourism Management, and International Business majors. Finance minor is not open to Finance, Financial Services, or Real Estate majors.

## Real Estate Minor

(Minor Code: 05111) (SIMS Code: 222193)
Admission to the minor in real estate requires completion of at least 60 units with a minimum overall GPA of 2.9 and completion of Finance 240 with grade of $C(2.0)$ or better.

The minor in real estate consists of a minimum of 15-18 units to include Finance 240, 331, 431; Business Administration 323*; and six units selected from Finance $333,433,435,437$.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University. Students with a major in the Fowler College of Business, Hospitality and Tourism Management, or International Business should choose courses carefully with an adviser in their major department and the Fowler Center for Student Success (EBA-448).

Students must meet the prerequisites for the minor in effect at the time that they declare the minor. Contact the Fowler Center for Student Success (EBA-448) for admissions criteria and procedures.

[^12]
## Personal Financial Planning Certificate

 (SIMS Code: 226601)The purpose of this program is to provide a strong educational basis for persons desiring careers in the field of personal financial planning. Two categories of students are admitted: Matriculated students who have been admitted to an upper division Fowler College of Business major and nonmatriculated students who work in the financial services industry, who may take the courses on a space-available basis.

This certificate is a program registered with the Certified Financial Planner Board of Standards, Inc.

Prerequisites to the program include Finance 240; Accountancy 201; Economics 101, 102; and Statistics 119 or Economics 201. (15 units.)

The certificate requires 24 units to include Finance 327, 421 or 427, 522, 585, 589, and 590; Accountancy 503; and Business Administration 323. In order to qualify for this certificate, a " $C$ " (2.0) average in the upper division certificate courses is required.

The adviser for the certificate is Dr. Thomas M.D. Warschauer, Department of Finance. All course units may be used for business majors where applicable. Courses in the certificate may not be counted toward the minor.

## Courses (FIN)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

## FIN 240. Legal Environment of Business (3)

Business legal environment system, sources of law, procedures and ethics associated with implementation of law. Law of torts and intellectual property; contracts and sales; agency and employment; negotiable instruments and banking; business organizations.

## FIN 250. Financial Literacy (3) [GE]

Financial health, investments, life, property and liability insurance, residence and auto purchases, retirement and estate planning, tax planning, time value of money, and use of credit.

## FIN 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)

## FIN 321. Managerial Economics (3)

Prerequisite: Approved upper division business major, business minor, or another major approved by the Fowler College of Business. Proof of completion of prerequisite required: Copy of transcript.

Role of economic analysis in management decisions. Study of demand, cost, supply theories from a business viewpoint. Emphasis on managerial decision making.

## FIN 325. Intermediate Finance (4)

Prerequisite: Business Administration 323 with a minimum grade of C. Proof of completion of prerequisite required: Copy of transcript.

Capital expenditure decision process. Measuring and evaluating benefits and costs. Cost of capital and the evaluation process. Capital rationing problems. Risk and uncertainty in decision process. Agency theory, option pricing, and arbitrage pricing in decision process.

## FIN 326. Financial Institutions Management (3)

Prerequisite: Business Administration 323. Proof of completion of prerequisite required: Copy of transcript.

Financial theory and risk management techniques related to the management of financial institutions. Impact of the economic, regulatory, and technological environments on management of financial institutions. Interaction of institutions within the financial services sector.

## FIN 327. Investments (3)

Prerequisite: Business Administration 323. Proof of completion of prerequisite required: Copy of transcript.

Measures of risk and return. Methods of security analysis, valuation, and capital asset pricing model. Portfolio theory and management; stocks, bonds, options, and futures; hedging; mutual funds and partnerships; and investment taxation.
FIN 328. Entrepreneurial Finance (3)
Prerequisite: Business Administration 323. Proof of completion of prerequisite required: Copy of transcript.

Financial management tools and techniques over the stages of life cycle of a venture: development, start up, rapid growth and maturity. Linkages between market opportunity, competitive position, composition, and sources of financing of the ventures.
FIN 329. International Business Finance (3)
Prerequisite: Business Administration 323. Proof of completion of prerequisite required: Copy of transcript.

Foreign exchange markets and instruments; international financial institutions; trade and balance of payments; exchange rate behavior and currency-risk hedging: cross-border investment; applications to management of international business.

## FIN 331. Real Estate Principles (3)

Prerequisite: Completion of lower division course requirements in business major or minor. Proof of completion of prerequisite required: Copy of transcript.

Fundamental operations of the real estate market; principles of real property valuation, financing, law, investment, brokerage, management, and development.

## FIN 333. Law of Real Property (3)

Prerequisite: Finance 331. Proof of completion of prerequisite required: Copy of transcript.

Legal theory and practice of estates in land; landlord and tenant relationships; land transactions; mortgages and trust deeds; easements; land use; ownership rights in land; environmental law.
FIN 336. Principles of Residential Property Management (3)
Prerequisite: Approved upper division business major, business minor, or another major approved by the Fowler College of Business. Proof of completion of prerequisite required: Copy of transcript.

Roles and responsibilities of the residential property manager to include maintaining property, positioning properties to maximize investment return, and optimizing tenant relations and retention.
FIN 421. Portfolio Management and Security Analysis (3)
Prerequisite: Finance 327. Proof of completion of prerequisite required: Copy of transcript.

Market efficiency. Risk and utility analysis. Portfolio theory. Security analysis under modern investment theory. Advanced debt management and options techniques. Financial options and futures. Asset allocation and performance evaluation. Limited partnership investment analysis.
FIN 423. Financial Analysis and Management (4)
Prerequisites: Finance 321, 325, and Accountancy 326. Proof of completion of prerequisites required: Copy of transcript.

Integration of various aspects of finance, application of financial theory. Financial decision making in the firm. Case study.
FIN 427. Derivatives and Financial Risk Management (3)
Prerequisite: Business Administration 323. Proof of completion of prerequisite required: Copy of transcript.

Introduce derivative instruments such as futures, options and swaps, nature of their markets and pricing methods. Applications of those instruments for hedging risks in equities, commodities, and exchange rates.
FIN 431. Real Estate Finance (3)
Prerequisite: Finance 331. Proof of completion of prerequisite required: Copy of transcript.

Methods of financing real estate; sources of funds; governmental financial agencies; feasibility analysis for various types of properties.

FIN 433. Theory of Real Property Value (3)
Prerequisite: Finance 331. Proof of completion of prerequisite required: Copy of transcript.

Introduction to theories of real property value. Techniques of value determination. Data analysis techniques.

## FIN 435. Real Estate Investment Analysis (3)

Prerequisite: Finance 331.
Theories and methods of investment analysis applied to real estate. Integration of various aspects of real estate from the investors perspective. Use of computer models for investment decision making.

## FIN 437. Real Estate Development (3)

Prerequisite: Finance 331.
Real estate development process. Fundamental real estate market behavior. Project level proforma and master schedule development. Project financing. Shifting priorities and perspectives in due diligence, entitlement, construction, closeout, leasing and occupancy phases. Case studies for multiple property types.

## FIN 496. Selected Topics in Finance (1-4)

Prerequisite: Consent of department chair.
Selected areas of concern in finance. May be repeated with new content with consent of department chair. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

## FIN 498. Investigation and Report (1-3)

Prerequisites: Consent of instructor and senior standing.
A comprehensive and original study of a problem connected with finance under the direction of one or more members of the finance staff. May be repeated with new content. Maximum credit six units.

## FIN 499. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

FIN 522. Individual Insurance Management (3)
Prerequisites: Undergraduate: Completion of lower division requirements for the major. Graduate: Completion of prerequisite core. Proof of completion of prerequisites required: Copy of transcript.

Economic, legal, social, and ethical considerations of individual, business and group insurance including life, health, property, and liability insurance. Risk exposure and policy analysis.
FIN 585. Estate Planning Issues and Practice (3)
Prerequisite: Undergraduate: Completion of lower division requirements for the major. Graduate: Completion of prerequisite core. Proof of completion of prerequisites required: Copy of transcript.

Tax and non-tax issues in establishment of a personal estate plan. Financial and non-financial goals and objectives. Not open to students with credit in Finance 445 or 705.
FIN 589. Personal Financial Planning (3)
Prerequisite: Business Administration 323. Proof of completion of prerequisite required: Copy of transcript.

Financial planning process including data gathering, cash flow and debt considerations. Retirement planning including social security. Education funding. Practice management considerations including establishment of ethical and legal client relationships.

## FIN 590. Personal Financial Planning Practicum (3)

Prerequisite: Credit or concurrent registration in Finance 589 or 657. Proof of completion of prerequisite required: Copy of transcript.

Preparation of family financial plans using comprehensive cases and/or real financial data. Financial planning software. Counseling and communication skills, behavioral finance, client psychology, practice standards, discipline and ethics. Students may register once at the undergraduate level and may repeat with new content at the graduate level.
FIN 596. Contemporary Topics in Finance (1-3)
Prerequisites: Business major approved by the Fowler College of Business and consent of instructor.

Contemporary topics in modern finance. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

## Refer to the Graduate Bulletin.

## In the Department of European Studies <br> In the College of Arts and Letters

OFFICE: Storm Hall 224A
TELEPHONE: 619-594-5111 / FAX: 619-594-8006
E-MAIL: french.coord@sdsu.edu
WEBSITE: http://french.sdsu.edu
Faculty
Emeritus: Benkov, Cornwell, Cox, Jackson, Lyman-Hager, Palmer, Sacco, Schorr
Chair: Donadey (Interim)
Professor: Donadey
Assistant Professor: Benaglia
Lecturers: Miquel, Ransom, Rosskopf
Offered by the Department of European Studies
Master of Arts degree in French.
Major in French with the B.A. degree in liberal arts and sciences.
Major in European studies, with emphasis in French.
See European Studies.
Minor in French.

## Offered by International Business

Major in international business, with emphasis in French.

## The Major

A student who majors in French learns to speak the language, to read literature and cultural materials in their original form, and to interact with members of an important worldwide cultural community. With more than 120 million speakers on five continents, French is one of the five official languages of the United Nations and is an official language in over 40 countries in Africa, Europe, and the Americas. The French major provides a global perspective and can help prepare students for careers in the arts, business, education, international business, public service, tourism, and translation.

Students generally choose to major in French in order to enrich their lives rather than to train for a specific career, but many employers recognize the value of a well-rounded liberal arts education that includes critical thinking and communication skills. The increasing involvement of the United States in international business has created new opportunities for people interested in international management. Employers look for knowledge of a foreign country's culture and language together with training in economics or business. A major in French combines effectively with a second major or minor in business, economics, political science, the humanities, or another language area study.

A significant number of French majors choose a career in teaching. With a secondary teaching credential, one can teach at the high school level or pursue more advanced study in preparation for a university career, either in French or in related subjects such as linguistics or comparative literature.

Students majoring in French are strongly encouraged to participate in the CSU-IP (California State University International Programs) study abroad program in France.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Impacted Program

The French major is an impacted program. To be admitted to the French major, students must meet the following criteria:
a. Complete preparation for the major with a grade of $C$ (2.0) or better;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## French Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 11021) (SIMS Code: 112701)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in French courses can apply to the degree.

Students majoring in French must complete a minor in another field to be approved by the departmental adviser in French.

Preparation for the Major. French 100A, 100B, 201, 210, and 221 with a grade of $C$ (2.0) or better. (20 units) Recommended: History 105, 106.

Language Requirement. The language requirement is automatically fulfilled through coursework for preparation for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience Requirement. All French majors are required to complete an approved study abroad program in a French-speaking country consisting of a minimum of six units ( 90 hours). However, French majors are strongly encouraged to complete a more extensive abroad experience by participating in a semester or an academic year program. To fulfill the International Experience Requirement, French majors must enroll in a study abroad program approved by the department. Unapproved study abroad programs will not meet the international experience requirement for the major.

Major. A minimum of 27 upper division units in French to include French 301, 302, 305A, 305B, and 15 upper division electives in French to include at least one 500-level course. No more than one 400-level French course taught in English or Humanities 310 may be applied to the major.

## French Minor

## (Minor Code: 11021) (SIMS Code: 112701)

The minor in French consists of a minimum of 15 units taught in French, nine units of which must be in upper division French courses. One course taught in English may apply to the minor.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Interdisciplinary Studies in Three <br> Departments

Students selecting French as one of their departments in this major must complete all lower division preparation for the major or equivalent competency, and choose from among French 301, 305A, 305B, 421 and 422.

## Language Requirement for the B.A. Degree in Liberal Arts and Sciences

Students electing the study of French to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete French 201 or 210 or the equivalent level of competency. The usual sequence of coursework is French 100A, 100B, 201, 210, and 221. Refer to section of catalog on "Graduation Requirements" for additional ways to satisfy competency.

## High School Equivalents

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:

1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

## Courses (FRENC)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

Native speakers of French will not receive credit for taking lower division courses except with advance approval from the department.
All lower division courses in French are taught in French.
No credit will be given for lower division courses taken after successfully completing any upper division French course taught in French.

French courses must be completed in the following sequence: French 100A, 100B, 210, 221. No credit will be awarded for any of these courses completed out of sequence. French 201 may only be taken after completing French 100B, but may be taken in any order with the other 200-level courses.

## FRENC 100A. Elementary French I (5) [GE]

Interactive introduction to speaking, reading, and writing French in a cultural context. Essential language structures for communication at the novice level.
FRENC 100B. Elementary French II (5) [GE]
Prerequisite: French 100A or two years of high school French. Continuation of French 100A.
FRENC 201. Readings in French (3) [GE]
Prerequisite: French 100B or three years of high school French. Emphasis on reading. See Class Schedule for emphasis offered: Readings in French Culture, Readings in Francophone Culture, or Readings in Business French. NOTE: French majors, minors, and International Business majors are encouraged to enroll concurrently in French 210.
FRENC 210. French Grammar (3) [GE]
Prerequisite: French 100B with a grade of C (2.0) or better or three years of high school French.

Comprehensive survey of French grammar at the intermediate level. Analysis and use of typical French structures. NOTE: French majors, minors, and International Business majors are encouraged to enroll concurrently in French 201.

FRENC 221. Speaking and Writing French (4) [GE]
Prerequisite: French 210 with a grade of $\mathrm{C}(2.0)$ or better.
Prose models, tone, and register; speaking practices, written composition and oral expression.
FRENC 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
All upper division courses in French are taught in French unless otherwise stated.
FRENC 301. Advanced Grammar and Composition (3) [GE]
Prerequisite: French 221 with a grade of $\mathrm{C}(2.0)$ or better.
Advanced grammar and stylistics, intensive writing practice focused on a theme in French culture. Not open to students with eight or more years of schooling in institutions where French was the sole or primary medium of instruction. French 301 and 302 may be taken concurrently.
FRENC 302. Advanced Grammar and Translation (3) [GE]
Prerequisite: French 221 with a grade of $\mathrm{C}(2.0)$ or better.
Advanced grammar and comparative stylistics of French and English, taught through translation. French 301 and 302 may be taken concurrently.
FRENC 304. Phonetics and Oral Proficiency (3)
Two lectures and two hours of activity.
Prerequisite: Upper division standing in French.
Phonetic theory, listening, intonation and transcription practice, corrective phonetic and intonation exercises. Study of varieties of Francophone oral expression.
FRENC 305A. Survey of French Literature (3) [GE]
Prerequisites: Ten units of 200-level French.
Important movements, authors, and works in French literature from the Middle Ages to the Revolution.
FRENC 305B. Survey of French Literature (3) [GE]
Prerequisites: Ten units of 200-level French.
Important movements, authors, and works in French literature from the Revolution to present.
FRENC 400. Advanced French in Paris (3)
Prerequisite: Ten units of 200 -level French.
Development of advanced level proficiency skills through writing and speaking. Offered only through the Paris Semester study abroad program.
FRENC 421. French Civilization (3) [GE]
Prerequisites: Ten units of 200-level French.
French civilization from Middle Ages to the present. Artistic, intellectual achievements and cultural movements.
FRENC 422. Contemporary France (3) [GE]
Prerequisites: Ten units of 200-level French.
Contemporary France, emphasizing political, economic and social structures as well as artistic, intellectual, and cultural trends.
FRENC 423. Commercial French (3)
Prerequisite: French 301. Proof of completion of prerequisite required: Copy of transcript.

French commercial practices and language, the enterprise, correspondence, advertising, telecommunications, banking, transportation, import-export, insurance, accounting, stock market, preparation for the Certificat offered by the Paris Chamber of Commerce.
FRENC 424. French Cinema and Theory (3) [GE]
Two lectures and two hours of activity.
French cinema emphasizing social, political, and cultural changes in modern France. Topics include film theory, the new wave, history in cinema, influence of feminism, French colonialism, race, class, and gender in modern culture. Taught in English.
FRENC 465. Africa in Literature and Film (3) [GE]
(Same course as Africana Studies 465)
African cultural history through literature and film. Consistency/ variety of African cultural expressions and conventions in literature and film. Taught in English.

FRENC 495. French Internship (3) $\mathrm{Cr} / \mathrm{NC}$
Prerequisites: Upper division standing in major and consent of instructor.

Practical work experience in a field related to French and Francophone studies. Work done under joint direction of activity sponsor and instructor. Approved international internships may count towards international requirement for major.

## FRENC 496. Topics in French Studies (1-4)

Topics in French literature, culture and linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit nine units. May be taught in English.
FRENC 499. Special Study (1-3)
Prerequisites: French 302, 305A, 305B.
Individual study. Maximum credit six units. This course is intended only for students who are currently enrolled in or who already have credit for all upper division courses in French available in any given semester.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
FRENC 501. Translation (3)
Prerequisite: French 302.
Stylistic comparison of French and English through translation of a variety of prose styles from English to French and from French to English.

## FRENC 520. French and Francophone Literary Studies (3)

Prerequisites: French 302 and 305A or 305B.
Specialized study of a century, genre, movement or theme in French and Francophone literature. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.
FRENC 530. French and Francophone Cultural Studies (3)
Prerequisites: French 302 and 421 or 422.
Specialized study of artistic and intellectual trends, customs, and politics in French and Francophone culture. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

## FRENC 596. Topics in French Studies (1-4)

Prerequisite: French 302.
Topics in French literature, culture, and linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of nine units of 596. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

## General Studies

In the Division of Academic Engagement and Student Achievement

OFFICE: Administration 101
TELEPHONE: 619-594-2209
E-MAIL: preciado@sdsu.edu
Director: José R. Preciado (Academic Engagement and Student Achievement)

## General Information

General studies courses serve as pathways for academic recovery, student transitions, and transformational learning experiences in community engagement, creative practices, internships, research, shared intellectual programs, and study abroad. A select number of general studies courses also satisfy general education graduation requirements.

## Courses (GEN S)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

GEN S 100. University Seminar (1) $\mathrm{Cr} / \mathrm{NC}$
Prerequisite: Open only to freshmen.
Provides opportunities to interact with faculty and staff in a small group setting. Students acquire study and interpersonal skills for academic and personal success. Special sessions are offered featuring campus resources including library, advising, career, health and wellness services.
A. University Seminar
B. Learning in Communities
C. Living/Learning Community

GEN S 147. Data Literacy: Human Choices Behind the Numbers (3) [GE]
How social scientists use data, presentation of empirical analysis, and role of assumptions and choices in analyses.
GEN S 150. Building Your Future Self for Success in College and Beyond (3) [GE]
First-year students will meet one another where they are, build community, and explore how the latest interdisciplinary research, strategies, and tools can help cultivate success in academic and life pursuits as they develop and realize their future selves. Not open to students with credit in General Studies 100A, 100B, or 100C.

## GEN S 200. Professional Experience and Community

## Service (1-3) Cr/NC

Prerequisites: Twelve units of college credit, minimum grade point average of 2.0, concurrent participation in professional or community service activity, and approval of course contract.

Academic work designed with faculty approval to complement concurrent paid or unpaid professional or community service experience. Information and course contract forms available in Division of Academic Engagement and Student Achievement, AD-220. Applications must be submitted to the division prior to the end of the first week of classes. May be used to satisfy major or minor requirements only upon written approval of department chair. No combination of General Studies 200 and 400 in excess of six units may be counted for credit toward a bachelor's degree.

## GEN S 203. Foundations of Cultural Competency (3)

Cultural self-awareness, ethnocentrism, individual biases, institutional oppression, microaggressions, race relations. Historical background of racism. Impacts on current majority-minority relationships. (Formerly numbered Education 203.)

## GEN S 250. Interdisciplinary Topics (1-4)

Interdisciplinary selected topics course. To enroll contact the faculty adviser of the department offering the course. May be repeated with new content. Maximum credit four units.

## GEN S 255. Bounce Back Retention Seminar (1) $\mathrm{Cr} / \mathrm{NC}$

Prerequisites: Academic probation students only. All participants sign Institutional Review Board (IRB) consent form.

In a highly interactive, small group setting, students learn a variety of skills, such as time management, test taking, class preparedness, and study skills, in order to strengthen performance. Students learn what personal attributes contribute to academic success and learn how to recognize and expand on these characteristics.

GEN S 280. Introduction to Civic Engagement (3) [GE]
Prerequisite: Minimum grade point average of 2.0.
Civic engagement through service learning. Collective action and global citizenship. Civic dimensions supporting democratic engagement. Civic capacities and literacies for social responsibility. One to two hours of weekly community service required.
GEN S 290. Introduction to Undergraduate Research (3) [GE]
Prerequisite: Linguistics 200 or Rhetoric and Writing Studies 200 with a grade of $C$ (2.0) or better.

Basic principles and practices of research inquiry. Design and methodology of three research paradigms (mixed methods, qualitative, quantitative) and proposal preparation.

## GEN S 299. Special Study (1-3)

Prerequisites: Consent of department chair and instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

GEN S 340. Confronting AIDS (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A. Natural Sciences and Quantitative Reasoning.

Examines the AIDS epidemic from historical, epidemiological, biological, medical, psychological, political, legal, and ethical perspectives.

## GEN S 350. Interdisciplinary Topics (1-4)

Interdisciplinary selected topics course. To enroll contact the faculty adviser of the department offering the course. May be repeated with new content. Maximum credit four units.

## GEN S 400. Professional Experience and Community

## Service (1-3) Cr/NC

Prerequisites: Upper division standing, minimum grade point average of 2.0, concurrent participation in professional or community service activity and approval of course contract.

Academic work designed with faculty approval to complement concurrent paid or unpaid professional or community service experience. Information and course forms available in Division of Academic Engagement and Student Achievement, AD-220. Applications must be submitted to the division prior to the end of the first week of classes. May be used to satisfy major or minor requirements only upon written approval of department chair. No combination of General Studies 200 and 400 in excess of six units may be counted for credit toward a bachelor's degree.
GEN S 420. Disability and Society (3) [GE]
Prerequisite: Upper division standing.
Explores the range of the disability experience; examines society's attitudes toward individuals and the interrelationship between societal institutions and the perception of people with disabilities. Contemporary issues with particular emphasis on disability culture, ableism, and inclusion.
GEN S 450. Life and Culture Semester Abroad (3) [GE]
Prerequisite: Upper division standing.
Life and culture of a foreign country through an approved semester abroad program sponsored by an academic department or program at SDSU. Requires lecture attendance, excursions and site visits, examinations and written reports. See Class Schedule for geographic location.
GEN S 480. Engaged Citizenship and Social Responsibility (3) [GE]
Prerequisites: General Studies 280, upper division standing, and minimum grade point average of 2.0.

Fieldwork in multidisciplinary analyses of civic citizenship and social responsibility through participatory action research and inquiry driven service in pluralistic communities. Service paradigms for engaged citizenship. Students will be required to complete nine hours of supervised fieldwork per week and to attend weekly meetings with instructor.
GEN S 490. Undergraduate Research (1-3)
Prerequisite: Upper division standing.
Research and creative activities to include preparation for qualitative and quantitative empirical research projects. Identify problem, formulate research question, design small-scale investigation, collect and analyze data, present findings, and may include creative and performing arts projects. May be repeated with new content. Maximum credit six units.

# Geography 

In the College of Arts and Letters

## OFFICE: Storm Hall 314

TELEPHONE: 619-594-5437 / FAX: 619-594-4938

## Faculty

Emeritus: Aguado, Ayala, Fredrich, Getis, Greenwood, Griffin, Hope, Johnson, McArthur, Pryde, Quastler, Richardson, Stow, Stutz, Weeks, Wright
Chair: Bosco
The Stephen and Mary Birch Foundation Chair in Geographical Studies: Christakos
The June Burnett Chair in Children's and Family Geographies: Aitken
Professors: Aitken, An, Biggs, Bosco, Christakos, Jankowski, Levine, Marcelli, O'Leary, Skupin, Swanson, Tsou
Associate Professors: McMillan, Nara
Assistant Professors: De Sales, Quandt
Lecturers: Costello, Osborn, Thorngren

## Offered by the Department

Doctor of Philosophy degree in geography.
Master of Arts degree in geography.
Master of Science degree in geography.
Concentration in geographic information science.
Concentration in watershed science.
Major in geography with the B.A. degree
in applied arts and sciences.
Emphasis in general geography.
Major in geography with the B.A. degree
in liberal arts and sciences.
Emphasis in environment, sustainability, and policy.
Emphasis in geographic information science and technology. Emphasis in human geography and global studies.
Major in geography with the B.S. degree in applied arts and sciences. Emphasis in geographic information science and technology. Emphasis in water, climate, and ecosystems.
Minor in geography.
Certificate in geographic information science.

## The Stephen and Mary Birch Foundation Chair in Geographical Studies

The Stephen and Mary Birch Foundation Chair in Geographical Studies was created through the Birch Foundation's grant to the Department of Geography to endow a chair and create a Center for Earth Systems Analysis Research. Professor George Christakos, internationally recognized for his expertise in theory and methodology of spatial analysis and mathematical modeling applied to environmental, ecological, health, and geographical systems, is the third holder of the chair.

## The June Burnett Chair in Children's and Family Geographies

The Children's and Family Geographies Chair was created in 2013 as part of the Department of Geography's June Burnett Endowment. The chair is in support of the Center for Interdisciplinary Studies of Young People, Environments, Society, and Space (YESS), and focuses on spatial research and therapeutic/ ethnographic practices related to the well-being of children and young people. Professor Stuart C. Aitken, internationally recognized for his research on children's geographies, youth activism, critical theory, and qualitative methodologies is the first holder of the chair.

## The Major

Geography is the study of spatial aspects of the physical environment, human activities and landscapes, and the nature of their interactions. Geographers draw upon and develop theories in both the physical and social sciences. As physical scientists, they study the processes and resulting features of the earth's surface, such as vegetation, climate, hydrology, soils, and landforms. As social scientists, geographers explore such topics as the arrangement of societies on the earth's surface, water and land use patterns, urbanization and urban life, migration, resource and energy usage, environmental conservation, globalization, development and social justice.

Through classroom and laboratory experience, field work, and community involvement students are provided with the knowledge and skills required to appreciate the diversity of landscapes, people and places, the interdependence of places on the surface of the earth, and the spatial processes and relationships that affect contemporary society.

A variety of career opportunities exist for geography majors in business, nonprofit, government and education. In recent years many graduates with bachelor degrees have entered a wide range of analytical and planning careers, with job titles such as environmental policy analyst, urban/regional planner, cartographer, geographic information system (GIS) analyst/specialist, energy planner, water resources planner/manager, natural resource manager/planner, park specialist/planner, National Park Service ranger/administrator, habitat restoration manager, and non-profit organization planner/administrator. Some students go on to graduate programs in geography, public health, urban and regional planning and other related disciplines.

The Department of Geography offers a broad range of fields from which to select an emphasis. These include the following:

## General Geography

This program provides students with an overview of the diverse fields of geography and exposes them to its breadth of methods. It is primarily designed for students transferring from a California Community College with an Associate Degree in Geography (AAT) under the Transfer Model Curricula (TMC), which allows them to graduate with no more than 60 additional units. It is open to all students.

## Environment, Sustainability, and Policy

This emphasis is concerned with human-environmental interactions, including the impacts of human activity on the earth and the consequences of environmental change on social life. Students will learn concepts and tools that help them understand and address contemporary environmental issues such as loss of biodiversity, pollution and natural resource degradation, water shortages, food and energy crises, resource conflicts, climate change, devegetation and many other compelling challenges facing society today and in the future. Through their coursework, they will investigate the cultural practices, social structures, and political-economic forces that shape the relationships between society and nature.

## Geographic Information Science and Technology (B.A.)

This emphasis focuses on the various methods used by geographers to represent and analyze geographic information about the natural and social world. These methods include cartography, geographic information systems, remote sensing, spatial statistics and qualitative analysis. Students in this emphasis will learn how to apply skills and use contemporary technologies to solve problems and conduct research. Students interested in the development of new geographic methods may consider the Bachelor of Science degree in geographic information science and technology, which requires additional courses in computer science.

## Human Geography and Global Studies

This emphasis deals with the spatial aspects of human existence: how people and their activities are distributed in space, how they use and perceive space, and how they create and sustain the places that make up the earth's surface. It focuses on the connections between global and local scales and teaches students how to think geographically about global issues such as poverty, migration, environment and development, and changing technology. Human geography includes urban geography, political geography, demography, economic geography, political ecology, social and cultural geography, feminist geography and many other emerging fields, such as children's geographies. It encompasses a variety of theoretical approaches and methods.

## Geographic Information Science and Technology (B.S.)

This emphasis addresses the theory and practice of information science from a distinctly geographic perspective, with a focus on principles, methods, and technology. Students become familiar with how to generate, manage and evaluate information about processes, relationships, and patterns in various application domains. This program is for students interested in analytical approaches to mapping, visualization, and problem solving using contemporary methods of GIScience, remote sensing, computer science, and statistics.

## Water, Climate, and Ecosystems

This emphasis focuses on scientific explanations of the earth's physical features and processes and the human impacts on them. Students engage in classroom, laboratory and field activities in geomorphology, hydrology, watershed analysis, biogeography, climatology, and landscape ecology. Students in this emphasis will incorporate fundamental training in the physical and biological sciences with methodological techniques in spatial analysis, including the use of satellite imagery and geographic information systems, to study processes and resulting features of earth's physical environment.

## Minor in Geography

The minor is designed to build on the interdisciplinary nature of geography and allow students to incorporate a geographic approach to their discipline of interest. The geography minor is an attractive option to students who major in anthropology, biology, computer science, economics, engineering, environmental sciences, international security and conflict resolution, political science, sociology, and sustainability.

## Certificate in Geographic Information Science

The certificate program is for current students or graduates interested in gaining knowledge and skills in creating, processing, and analyzing geoinformation with methods and techniques of geographic information systems, remote sensing, and software engineering.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Impacted Program

The geography major and emphases are impacted programs. To be admitted to the geography major or an emphasis, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Geography Major

## With the B.A. Degree in Applied Arts and Sciences

## (Major Code: 22061)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

Graduation with Distinction. A student desiring to graduate with Distinction in Geography must meet the university requirements listed in the section of this catalog on "Graduation Requirements" and be recommended by the geography faculty.

## Emphasis in General Geography

(SIMS Code: 112912)
Students selecting this emphasis are not required to complete a minor in another department.

Preparation for the Major. Geography 101, 101L, 102 or 106, 104. (10 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or English $508 \mathrm{~W}, 581 \mathrm{~W}, 584 \mathrm{~W}$, or Rhetoric and Writing Studies 305W, 500W, $503 W$ with a grade of $C(2.0)$ or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 32 upper division units in geography to include:
Student Assessment: Geography 395 to be taken in the student's first fall semester as a geography major (one unit) and Geography 495 to be taken during the spring semester of the calendar year in which the student expects to graduate (one unit);
Core: Eighteen units, with at least three units from each of the following groups: (a) Regional Geography: Geography 320, 321, 324, 336, 426; (b) Human Geography: Geography 312, 340, 348, 353, 354, 440 [or Political Science 440], 454, 554, 573; (c) Environmental Geography: Geography 340, 348, 370, 426, 454, 570, 572-575; (d) Physical Geography: Geography 303, 375, 401, 409, 503, 506, 507, 509, 511, 512, 574, 576; (e) Geographic Methods: Geography 380, 381, 383, 385, 484, 580, 581-594 [or Big Data Analytics 594];
Emphasis: Twelve units of core courses (if not already taken). Internship, senior thesis, special study, special topics, or study abroad may be used to meet this requirement when appropriate and preapproved by the undergraduate adviser.

## Geography Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 22061)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 57 units in geography courses can apply to the degree for students with an emphasis in environment, sustainability, and policy, or the emphasis in geographic information science and technology, or the emphasis in human geography and global studies.

Graduation with Distinction. A student desiring to graduate with Distinction in Geography must meet the university requirements listed in the section of this catalog on "Graduation Requirements" and be recommended by the geography faculty.

## Emphasis in Environment, Sustainability, and Policy

(SIMS Code: 112914)
Students selecting this emphasis are not required to complete a minor in another department.

Preparation for the Major. Geography 101, 101L, 102 or 106, 104, 170, and Environmental Science 100 [or Sustainability 100]. (16 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or English 508W, 581W, 584W, or Rhetoric and Writing Studies 305W, 500W, $503 W$ with a grade of $C(2.0)$ or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 41 upper division units in geography to include:
Student Assessment: Geography 395 to be taken in the student's first fall semester as a geography major (one unit) and Geography 495 to be taken during the spring semester of the calendar year in which the student expects to graduate (one unit);
Core: Eighteen units, with at least three units from each of the following groups: (a) Regional Geography: Geography 320, 321, 324, 336, 426; (b) Human Geography: Geography 312, 340, 348, 353, 354, 440 [or Political Science 440], 454, 554, 573; (c) Environmental Geography: Geography 340, 348, 370, 426, 454, 570, 572-575; (d) Physical Geography: Geography 303, 375, 401, 409, 503, 506, 507, 509, 511, 512, 574, 576; (e) Geographic Methods: Geography 380, 381, 383, 385, 484, 580, 581-594 [or Big Data Analytics 594];
Emphasis: Twenty-one units of core courses (if not already taken). Internship, senior thesis, special study, special topics, or study abroad may be used to meet this requirement when appropriate and preapproved by the undergraduate adviser.

## Emphasis in Geographic Information Science and Technology

(SIMS Code: 112953)
Students selecting this emphasis are not required to complete a minor in another department.

Preparation for the Major. Geography 101, 101L, 102 or 106, 104; Computer Science 107; Statistics 250 or comparable statistics course. (16 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or English 508W, 581W, 584W, or Rhetoric and Writing Studies 305W, 500W, $503 W$ with a grade of $C(2.0)$ or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 41 upper division units in geography to include:
Student Assessment: Geography 395 to be taken in the student's first fall semester as a geography major (one unit) and Geography 495 to be taken during the spring semester of the calendar year in which the student expects to graduate (one unit);
Core: Eighteen units, with at least three units from each of the following groups: (a) Regional Geography: Geography 320, 321, 324, 336, 426; (b) Human Geography: Geography 312, 340, 348, 353, 354, 440 [or Political Science 440], 454, 554, 573; (c) Environmental Geography: Geography 340, 348, 370, 426, 454, 570, 572-575; (d) Physical Geography: Geography 303, 375, 401, 409, 503, 506, 507, 509, 511, 512, 574, 576; (e) Geographic Methods: Geography 380, 381, 383, 385, 484, 580, 581-594 [or Big Data Analytics 594];
Emphasis: Twenty-one units of core courses (if not already taken). Internship, senior thesis, special study, special topics, or study abroad may be used to meet this requirement when appropriate and preapproved by the undergraduate adviser.

## Emphasis in Human Geography and Global Studies (SIMS Code: 112917)

Students selecting this emphasis are not required to complete a minor in another department.

Preparation for the Major. Geography 101, 101L, 102 or 106, 104, 170. (13 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or English 508W, 581W, 584W, or Rhetoric and Writing Studies 305W, 500W, $503 W$ with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. Students in this emphasis are strongly encouraged to pursue an international experience to increase student awareness of cross-cultural and global issues, which are critical to their development as professional geographers and citizens in a complex and rapidly changing world. A variety of options, including short term and semester formats are available to meet the needs of different students, including those with family and work responsibilities. These options should be discussed with and preapproved by the undergraduate adviser.

Major. A minimum of 44 upper division units in geography to include:
Student Assessment: Geography 395 to be taken in the student's first fall semester as a geography major (one unit) and Geography 495 to be taken during the spring semester of the calendar year in which the student expects to graduate (one unit);
Core: Eighteen units, with at least three units from each of the following groups: (a) Regional Geography: Geography 320, 321, 324, 336, 426; (b) Human Geography: Geography 312, 340, 348, 353, 354, 440 [or Political Science 440], 454, 554, 573; (c) Environmental Geography: Geography 340, 348, 370, 426, 454, 570, 572-575; (d) Physical Geography: Geography 303, 375, 401, 409, 503, 506, 507, 509, 511, 512, 574, 576; (e) Geographic Methods: Geography 380, 381, 383, 385, 484, 580, 581-594 [or Big Data Analytics 594];
Emphasis: Twenty-four units of core courses (if not already taken). Internship, senior thesis, special study, special topics, or study abroad may be used to meet this requirement when appropriate and preapproved by the undergraduate adviser.

## Geography Major

With the B.S. Degree in Applied Arts and Sciences (Major Code: 22061)

## Emphasis in Geographic Information Science and Technology

(SIMS Code: 112992)
Students selecting this emphasis are not required to complete a minor in another department.

Preparation for the Major. Geography 101, 101L, 102 or 106, 104; Biology 100, 100L, or Chemistry 200, or Physics 180A, 182A; Computer Science 107, 108; Mathematics 124 or 150; Statistics 250 or comparable statistics course. (27-28 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or English 508W, 581W, 584W, or Rhetoric and Writing Studies 305W, 500W, 503 W with a grade of $C(2.0)$ or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 41 upper division units in geography to include:
Student Assessment: Geography 395 to be taken in the student's first fall semester as a geography major (one unit) and Geography 495 to be taken during the spring semester of the calendar year in which the student expects to graduate (one unit);
Core: Eighteen units, with at least three units from each of the following groups: (a) Regional Geography: Geography 320, 321, 324, 336, 426; (b) Human Geography: Geography 312, 340, 348, 353, 354, 440 [or Political Science 440], 454, 554, 573; (c) Environmental Geography: Geography 340, 348, 370, 426, 454, 570, 572-575; (d) Physical Geography: Geography 303, 375, 401, 409, 503, 506, 507, 509, 511, 512, 574, 576; (e) Geographic Methods: Geography 380, 381, 383, 385, 484, 580, 581-594 [or Big Data Analytics 594];
Emphasis: Twenty-one units from core courses listed above in group (e) Geographic Methods, if not already taken. Internship, senior thesis, special study, special topics, or study abroad may be used to meet this requirement when appropriate and preapproved by the undergraduate adviser.

## Emphasis in Water, Climate, and Ecosystems (SIMS Code: 112988)

Students selecting this emphasis are not required to complete a minor in another department.

Preparation for the Major. Geography 101, 101L, 102 or 106, 103, 104, 170 or Environmental Science 100 [or Sustainability 100]; Biology 100 and 100L, or Chemistry 200, or Physics 180A, 182A; Mathematics 124 or 150 ; Statistics 250 or comparable statistics course. (27-28 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or English $508 \mathrm{~W}, 581 \mathrm{~W}, 584 \mathrm{~W}$, or Rhetoric and Writing Studies 305W, 500W, 503W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 41 upper division units in geography to include:
Student Assessment: Geography 395 to be taken in the student's first fall semester as a geography major (one unit) and Geography 495 to be taken during the spring semester of the calendar year in which the student expects to graduate (one unit);
Core: Eighteen units, with at least three units from each of the following groups: (a) Regional Geography: Geography 320, 321, 324, 336, 426; (b) Human Geography: Geography 312, 340, 348, 353, 354, 440 [or Political Science 440], 454, 554, 573; (c) Environmental Geography: Geography 340, 348, 370, 426, 454, 570, 572-575; (d) Physical Geography: Geography 303, 375, 401, 409, 503, 506, 507, 509, 511, 512, 574, 576; (e) Geographic Methods: Geography 380, 381, 383, 385, 484, 580, 581-594 [or Big Data Analytics 594];
Emphasis: Twenty-one units of core courses listed above in group (d) Physical Geography, if not already taken. Internship, senior thesis, special study, special topics, or study abroad, as well as up to three units from specific courses in biology, civil engineering, and geological sciences may be used to meet this requirement when appropriate and preapproved by the undergraduate adviser.

## Geography Minor

The minor in geography consists of a minimum of 21-22 units of geography to include Geography 101, 102, 104, and one of the following areas:
Cultural (SIMS Code: 112937): Six units from Geography 312, $340,354,454,554$, and six units selected from regional courses Geography 320-336, 426.
Methods of Geographic Analysis (SIMS Code: 112952): Nine units selected from Geography 380-385, 484, 581-589, 591, 591L, and three units selected from any other upper division geography course.
Natural Resource and Environment (SIMS Code: 112966): Nine units selected from Geography 340, 348, 370, 375, 426, 440 [or Political Science 440], 570-576, and three or four units selected from methods courses Geography 380-385, 484, 581-589.
Physical (SIMS Code: 112961): Nine units selected from Geography 303, 375, 401, 409, 506-512, and three or four units selected from methods courses Geography 380-385, 484, 581-589.
Urban and Regional Analysis (SIMS Code: 112981): Nine units selected from Geography 340, 353, 354, 440 [or Political Science 440], 454, 554,572, and three or four units from either methods or regional courses Geography 320-336, 380-385, 426, 484, 581-589.
Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Geographic Information Science Certificate*

## (SIMS Code: 112949)

The purpose of the program is to prepare students to acquire, analyze, manage, visualize, and develop applications with geospatial data in public and private organizations. Students must apply for admission to the program before the completion of 12 certificate units and must complete the required units with a 2.5 grade point average.

The certificate requires 27 units distributed between the departments of Geography and Computer Science as follows: $12-15$ units selected from Geography 104, 381, 484, 581-593, and 12-15 units selected from Computer Science 107, 108, 310, 320, $503,514,520,537$. Courses with relevant content (e.g. Geography 596 or Computer Science 596) may be substituted for the geography and computer science courses with the approval of the certificate adviser. Courses in the certificate may be counted toward the major in geography but may not be counted toward the minor.

## *Additional prerequisites required for this certificate.

## Courses (GEOG)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

GEOG 101. Earth's Physical Environment (3) [GE]
Earth systems and the global environment to include weather and climate, water, landforms, soils, and ecosystems. Distribution of physical features on Earth's surface and interactions between humans and environment, especially those involving global change.
GEOG 101L. Earth's Physical Environment Laboratory (1) [GE]
Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Geography 101.
Observations, hands-on experiments, and practical exercises involving weather, climate, soils, running water, landforms, and vegetation. Includes map fundamentals and interpretation, analysis of airborne and satellite imagery. Designed to supplement Geography 101.
GEOG 102. People, Places, and Environments (3) [GE]
Introduction to human geography. Global and local issues to include culture, development, migration, urbanization, population growth, identity, globalization, geopolitics, and environmental change. Field trips may be arranged.
GEOG 103. Weather and Climate (3) [GE]
The composition, structure, and circulation of the atmosphere, including elementary theory of storms and other weather disturbances.

## GEOG 104. Geographic Information Science and Spatial

## Reasoning (3) [GE]

Fundamental concepts in geographic information systems, cartography, remote sensing, spatial statistics, and global positioning systems. Use of critical technologies in addressing human and environmental problems.
GEOG 106. World Regional Geography (3) [GE]
Regional approaches to social, political, economic, environmental, and cultural interactions. Colonialism, globalization, development, environmental issues, and geopolitics.
GEOG 170. Sustainable Places and Practices (3) [GE]
Sustainability from a geographic perspective, focusing on role of everyday practices in creating sustainable places. Case studies illustrate geographic variations in the social organization of people/nature relationships and emphasize connections across global, local, and individual scales.

## GEOG 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

## GEOG 303. Severe Weather (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning required for nonmajors. Recommended: Geography 101 or 103.

Physical processes, human responses, and mitigation strategies related to atmospheric hazards, including blizzards, wind storms, severe thunderstorms, tornadoes, hurricanes, heat waves, floods, and drought.

## GEOG 312. Culture Worlds (3) [GE]

Geographical characteristics and development of major cultural realms of the world. Spatial components of contemporary conflict within and between these regions.
GEOG 320. California (3) [GE]
Prerequisite recommended: Geography 101 or 102.
Systematic and regional analysis of physical and cultural landscapes of California. Availability and use of water resources. Human patterns of population and migration, economic activities, and urban and ethnic landscapes. Field trips may be arranged.

## GEOG 321. United States (3) [GE]

Prerequisite recommended: Geography 101 or 102.
Systematic and regional analysis of physical, cultural, environmental, and economic landscapes of the United States. Current and relevant regional process and issues to include sustainability, physical processes, socioeconomic change and development, cultural dynamics.

## GEOG 324. Latin America (3) [GE]

Prerequisite recommended: Geography 101 or 102.
People, places, and environments of the region to include geographic dimensions of colonialism, territorial evolution and geopolitics, rural and urban livelihoods, and contemporary patterns of socio-spatial inequality.

## GEOG 336. Europe (3) [GE]

Prerequisite recommended: Geography 101 or 102.
Systematic analysis of the geographic bases of modern European life. Regional investigation of countries of Europe.
GEOG 340. Geography of Food (3) [GE]
Production, distribution, sale, consumption, and preparation of food from a geographic perspective. Key concepts in human and physical geography by exploring the environmental, political, economic, social, and cultural aspects of food.

## GEOG 348. Environment and Development (3)

Prerequisite: Geography 102 or 106 or 170 or Anthropology 102 or Sociology 101 or 102.

Geographic analysis of environmental and social issues in the global south. How colonialism, development, and globalization have shaped equity and sustainability issues and access to resources, environmental health, migration, and poverty around the world. Field trips may be arranged.

## GEOG 353. Economic Geography (3)

Prerequisite recommended: Geography 101 or 102.
Geographic relations of production, exchange and consumption; trade and economic development; location of economic activities; globalization and economic transformations at the national, regional, and local scales; institutional, social, political, environmental, and cultural aspects of economic activities in various places.

## GEOG 354. Geography of Cities (3) [GE]

Prerequisite recommended: Geography 101 or 102.
Survey of the location, function and spread of cities; the spatial and functional arrangement of activities in cities, leading to an analysis of current urban problems: sprawl, city decline, metropolitan transportation. Field trips may be arranged.

## GEOG 370. Conservation Science and Policy (3) [GE]

Prerequisite: Upper division standing.
Scientific understanding of human-environment systems; sustainable management of natural resources under changing global conditions; role of science in addressing environmental issues and development of environmental and conversation policy.

## GEOG 375. Environmental Hydrology (3)

Prerequisite: Geography 101 or 103 or Environmental Science 100 [or Sustainability 100] or Geological Sciences 104.

Hydrological processes to include precipitation, surface water, groundwater, water quality, and ecohydrology. Impact of human activities on water resources.

## GEOG 380. Map Investigation (3)

Two lectures and three hours of laboratory.
Prerequisite: Geography 101 or 102 or 104.
Use of the map as an analytical tool in geography. History of developments in cartography.

## GEOG 381. Computerized Map Design (3)

Two lectures and three hours of laboratory.
Prerequisite: Geography 101 or 102 or 104.
Art and science of creating digital maps as media for describing and analyzing geographic phenomena. Computer laboratory instruction and practice in cartographic techniques with emphasis on thematic maps and geographic information systems.

## GEOG 383. GIS Scripting Fundamentals (3)

Two lectures and three hours of laboratory.
Prerequisite: Computer Science 107.
Geospatial data processing, analysis, and modeling by scripting languages using Python and R and Structured Query Language for PostgreSQL.

## GEOG 385. Spatial Data Analysis (3)

Prerequisites: Geography 101 or 102; Statistics 250 or comparable course in statistics.

Analysis of spatially distributed data including computer applications. Spatial sampling, descriptive statistics for areal data, inferential statistics, use of maps in data analysis.

## GEOG 395. Introduction to the Major (1)

Introduction to the dimensions of the field of geography, to the courses and faculty, and to the learning objectives by which course and student outcomes are assessed.

## GEOG 401. Geomorphology (3)

Prerequisite: Geography 101.
How surface processes to include wind, water, ice, and gravity shape the Earth's landforms. May include field trips, ranging from investigation of local beaches and deserts to exploration of geomorphic forces shaping Yosemite National Park.

## GEOG 409. Global Climate Change (3)

Prerequisite: Geography 101 or 103.
Global climate system and feedbacks with biosphere. Past climates and potential future changes, including changes in greenhouse gases, ozone depletion and acid rain. Predictions and uncertainty regarding changes including natural and anthropogenic causes.

## GEOG 426. Regional Field Studies (3)

Prerequisite: Geography 101 or 102 or Environmental Science 100.

Regional analysis to include physical, cultural, environmental, economic geography at the field level. Specific field techniques/ topics taught in lecture and applied in the field. Required field trip of one week to 10 days.

## GEOG 440. Food Justice (3)

## (Same course as Political Science 440)

Prerequisite: Geography 102 or Political Science 102.
Food justice from perspectives of theory, institutions, markets, law, ethics, social mobilization, politics, and ecology. Political strategies, capabilities of food justice organizations; movements aimed at creating fair, healthy, sustainable food systems locally and globally.

## GEOG 454. Sustainable Cities (3)

Prerequisite: Geography 354.
Political and economic forces shaping the structure and organization of cities; physical and human consequences of urbanization; environmental, economic and social sustainability of cities. Housing, transportation, land use, urban services, employment, segregation, and social inequality.

GEOG 484. Geographic Information Systems (3)
Two lectures and three hours of laboratory.
Prerequisite: Three units from Geography 380, 381, 591, or from computer programming.

Procedures for encoding, storage, management, and display of spatial data; theory of computer-assisted map analysis; examination of important geographic information systems.

## GEOG 495. Geography Capstone (1)

Prerequisite: Geography 395 with a grade of C (2.0) or better for Geography majors.

Synthesis of knowledge gained by students in upper division geography courses at SDSU, based on in-class essays and creation of a portfolio outlining learning experiences in geography. Practical information to prepare for professional employment.

## GEOG 496. Selected Studies in Geography (3)

Prerequisite: Six units in geography.
Critical analysis of problems within a specific field of the discipline. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units. Field trips may be arranged.
GEOG 498. Senior Thesis (3)
Prerequisites: An overall grade point average of 3.0 and consent of department.
A written thesis based on an individual research project.
GEOG 499. Special Study (1-3)
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)

## GEOG 503. Modeling of Land-Atmosphere

 Biophysical Processes (3)Prerequisites: Geography 409, Environmental Science 301, Geological Sciences 305, or graduate standing.

Modeling, nature, and principles of land-atmosphere interaction processes to include heat and water fluxes and applications for assessing the impacts of land-cover change on climate.

## GEOG 506. Landscape Ecology (3)

Prerequisite: Geography 101. Recommended: Geography 370 or 385.

Links between landscape patterns and ecological processes at a variety of spatial scales to include causes and measures of landscape patterns, effects of landscape patterns on organisms, landscape models, landscape planning and management.

## GEOG 507. Geography of Natural Vegetation (3)

Prerequisite: Geography 101, Biology 100, or Environmental Science 100 [or Sustainability 100].
The natural vegetation formations of the world and their classifications, development, distribution, and environmental influences to include relationships to human activities. Field trips may be arranged.

## GEOG 509. Regional Climatology (3)

Prerequisite: Geography 101, 103, or Environmental Science 100 [or Sustainability 100].

Regional distributions of Earth's climates and basic principles governing atmospheric processes that control global distributions of climate types.
GEOG 511. Hydrology and Global Environmental Change (3) Prerequisite: Geography 101 or 103.
Hydrologic processes and regimes, how these are affected by environmental change and how hydrologic process and regimes affect patterns of environmental change. Processes operating at global, regional, and local scales are examined, including land-use/ land-cover change and climate change.

## GEOG 512. World on Fire (3)

Prerequisite: Geography 101 or 103 or Biology 100 or Environmental Science 100 [or Sustainability 100] or Geological Sciences 100 or 104.
Wild-land fire processes, controls, and effect on soils, water resources, and vegetation in contrasting ecosystems. Fire regimes and mitigation strategies. Fire research.

## GEOG 554. World Cities: Comparative Approaches to

 Urbanization (3)Prerequisite: Geography 354.
Worldwide trends in urbanization. Case studies of selected cities from various culture areas with focus on international variations in city structure and urban problems.

## GEOG 570. Environmental Conservation Practice (3)

Prerequisite: Geography 370.
Management of environmental and natural resources. Effective programs and the institutional frameworks in which they occur.
GEOG 572. Land Use Analysis (3)
Prerequisite: Geography 370.
Theoretical and practical approaches to land use management. Current and relevant techniques and policies at local, state and federal levels, aimed toward providing healthy and environmentally sound communities that provide positive benefits to society and the economy. Field trips may be arranged.
GEOG 573. Population and the Environment (3)
Prerequisite: Geography 102.
Population distribution, growth, and characteristics as they relate to environmental degradation, both as causes and consequences. Roles of women, sustainable development, carrying capacity, optimum population, and policy initiatives in relationships between population and environment.
GEOG 574. Water Resources (3)
Prerequisites: Geography 370 and 375.
Occurrence and utilization of water resources and the problems of water resource development. Field trips may be arranged.
GEOG 575. Geography of Recreational Land Use (3)
Prerequisite: Geography 101 or 102.
Importance of society, environment, and location in the use, management, and quality of recreation areas. Direct observation of practices and policies with field trips to local (San Diego) areas and an optional four-day trip to Yosemite National Park.
GEOG 576. Advanced Watershed Analysis (3)
Prerequisite: Geography 101, 103, or 104. Recommended: Geography 375 and 484.

Theory and techniques in watershed analysis. Use of GIS and statistical programming for analyses of geomorphology, hydrology, and water quality data.
GEOG 580. Data Management for Geographic Information Systems (3)
Two lectures and three hours of laboratory.
Prerequisites: Geography 381 or 484; Geography 383, Computer Science 107 or 108; or graduate standing.

PostgreSQL, PostGIS, and open source databases to store, manage, and query geospatial data.

## GEOG 581. Cartographic Design (3)

Two lectures and three hours of laboratory.
Prerequisite: Geography 381.
Computer-assisted map production techniques with emphasis on map design and color use.
GEOG 582. GIS Programming with Python (3)
Two lectures and three hours of laboratory.
Prerequisite: Geography 383,484 , or graduate standing. Recommended: Computer Science 107 or 108.

Automating geocoding processes by Python scripting, managing vector and raster data, and preprocessing geospatial data.
GEOG 583. Internet Mapping and Distributed GIServices (3)
Two lectures and three hours of laboratory.
Prerequisite: Geography 381 or 484.
Current development of Internet mapping and cartographic skills for web-based maps (multimedia, animation, and interactive design). Fundamental theories of distributed GIS to support Internet mapping with focus on distributed component technologies, Internet map servers, and web services.

GEOG 584. Geographic Information Systems Applications (3)
Two lectures and three hours of laboratory.
Prerequisite: Geography 484.
Spatial analysis methods in GIS, to include terrain, raster, and network analysis. Feature distributions and patterns. GIS data processing techniques to include spatial interpolation, geocoding, and dynamic segmentation. Designing and executing analytical procedures.
GEOG 585. Quantitative Methods in Geographic Research (3)
Prerequisite: Geography 385.
Application of statistical techniques to geographic research to include simple regression and correlation, multiple regression, geographically weighted regression, classification, factor analysis, and computer applications.

## GEOG 586. Qualitative Methods in Geographic Research (3)

Prerequisite: Geography 102.
Application of qualitative techniques to geographic research including reflexive survey design and in-depth interviews, non-obtrusive methods, landscape interpretation, textual methods and discourse analysis, feminist criticism, and humanistic and historical materialist perspectives on measurement.
GEOG 589. GIS-Based Decision Support Methods (3)
Prerequisite: Geography 484.
Integration of Geographic Information Systems (GIS) with discrete and continuous multiple criteria decision making (MCDM) methods. Applications of MCDM in land use planning, site selection, and resource management spatial decision problems.

## GEOG 590. Community-Based Geographic Research (3)

One lecture and four hours of activity or fieldwork.
Prerequisite: Consent of instructor. Recommended: Statistics 119.
Local social and/or environmental issues. Research design, data collection and analysis, collaboration with community-based organizations, reflection on research and social responsibility, communication of findings. Maximum credit six units.
GEOG 591. Remote Sensing of Environment (3)
Prerequisites: Geography 101, Environmental Science 100 [or Sustainability 100]. Recommended: Physics 180A-180B. Undergraduate students must be concurrently registered in Geography 591 and 591L. Graduate students may take Geography 591L concurrently or after Geography 591.

Acquiring and interpreting remotely sensed data of environment. Electromagnetic radiation processes, aerial and satellite imaging systems and imagery. Geographic analysis of selected human, terrestrial, and marine processes and resources. (Geography 591 and 591L formerly numbered Geography 587.)
GEOG 591L. Remote Sensing of Environment Laboratory (1)
Three hours of laboratory.
Prerequisites: Geography 101, Environmental Science 100 [or Sustainability 100]. Recommended: Physics 180A-180B. Undergraduate students must be concurrently registered in Geography 591 and 591L. Graduate students may take Geography 591L concurrently or after Geography 591.

Practical exercises, introductory processing, visual interpretation and mapping of remotely sensed imagery. (Geography 591 and 591L formerly numbered Geography 587.)
GEOG 592. Intermediate Remote Sensing of Environment (3)
Prerequisites: Geography 385, 591, 591L. Undergraduate students must be concurrently registered in Geography 592 and 592L. Graduate students may take Geography 592L concurrently or after Geography 592.

Digital image processing. Thermal infrared and microwave imaging systems and image interpretation principles. Geographic analysis of selected human, terrestrial, oceanographic, and atmospheric processes and resources. (Geography 592 and 592L formerly numbered Geography 588.)

GEOG 592L. Intermediate Remote Sensing of Environment Laboratory (1)
Three hours of laboratory.
Prerequisites: Geography 385, 591, 591L. Undergraduate students must be concurrently registered in Geography 592 and 592L. Graduate students may take Geography 592L concurrently or after Geography 592.

Digital image processing, visual interpretation, mapping of thermal infrared, and microwave imagery. (Geography 592 and 592L formerly numbered Geography 588.)
GEOG 593. GIS for Business Location Decisions (3)
Two lectures and three hours of laboratory.
Prerequisite: Geography 484 or graduate standing. Recommended: Geography 584, 589.

Geographic Information Systems (GIS) and location analysis methods to include modeling and spatial analysis. Applications of GIS and location analysis in business site selection, market segmentation, retail marketing, and service area analysis.
GEOG 594. Big Data Science and Analytics Platforms (3)
(Same course as Big Data Analytics 594)
Prerequisites: Geography 104, Computer Science 100 or 107; and Geography 385, Sociology 201, Statistics 250, or graduate standing.

Big data science to include analysis, data collection, filtering, GIS, machine learning, processing, text analysis, and visualization. Computational platforms, skills, and tools for conducting big data analytics with real world case studies and examples.

## GEOG 595. Geographic Internship (3)

Prerequisites: Six upper division units in geography and consent of instructor.

Students will be assigned to various government agencies and industry and will work under the joint supervision of agency heads and the course instructor.

## GEOG 596. Advanced Topics in Geography (1-3)

Prerequisite: Six upper division units in geography.
Advanced special topics in geography. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496,596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin

# Geological Sciences 

In the College of Sciences

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WEBSITE: http://www.geology.sdsu.edu
Faculty
Emeritus: Abbott, Bertine, Day, Dorman, Girty, Jiracek, Kern, Krummenacher, Marshall, Miller, Peterson, Rockwell,
Thorbjarnarson, Wallace
Chair: Gontz
The Rollin and Caroline Eckis Chair in Seismology: Olsen
Professors: Frost, Gontz, Kimbrough, Olsen, Schellenberg
Associate Professor: Ma
Assistant Professors: Maloney, Weingarten
Lecturers: Camp, Hanan, Robinson, Sacramento-McJilton

## Offered by the Department

Doctor of Philosophy degree in geophysics.
Master of Science degree in geological sciences.
Major in geological sciences with the B.S. degree
in applied arts and sciences.
Emphasis in general geology.
Emphasis in engineering geology.
Emphasis in environmental geosciences.
Emphasis in geophysics.
Emphasis in hydrogeology.
Emphasis in paleontology.
Major in geological sciences with the B.A. degree
in applied arts and sciences.
Minor in geological sciences.
Minor in oceanography.

## The Rollin and Caroline Eckis Chair in Seismology

A gift from Rollin and Caroline Eckis, combined with matching funds from the Atlantic Richfield Company and contributions from SDSU faculty and staff, established The Rollin and Caroline Eckis Chair in Seismology at SDSU. The late Rollin Eckis was former president of Richfield Oil Company and vice chairman of the board of Atlantic Richfield Company.

The first appointee to the chair, Dr. Steven M. Day, conducts research on the mechanics of earthquakes and earthquake hazards.The current appointee, Dr. Kim Bak Olsen, conducts research on seismic wave propagation as well as earthquake source description and hazards.

## The Major

Geological sciences is the study of the earth, its past, present, and future. Geoscientists apply basic physical, chemical, and biological principles to understand how the earth was formed, how it evolved, and how it may change in the future. In addition to understanding the origin and evolution of our planet, geologists seek to discover, use, and manage earth's resources in clean and environmentally responsible ways, and manage our water resources in a renewable way. The challenges will grow as geoscientists address major societal issues including dwindling energy resources, climate change, environmental pollution, and natural disasters from earthquakes, volcanic eruptions, and coastal subsidence.

Students who are curious about the planet on which we live, challenged by environmental problems facing humankind, and intrigued by a subject which combines both the arts and applied science, should consider the geological sciences as a major. Job prospects are good. Employment of geoscientists is projected to grow by 16 percent from 2012 to 2022, faster than the average for all occupations according to the U.S. Bureau of Labor Statistics. Many openings are expected in consulting firms and the oil and gas industry. Job opportunities should be excellent for geoscientists who graduate with a master's degree. Most new jobs will be in management, scientific, and geotechnical consulting services.

Many government agencies, including the U.S. Geological Survey, the U.S. Bureau of Reclamation, the California Department of Conservation, and regional planning offices hire geoscientists.

The department offers two undergraduate degree options:

- The Bachelor of Science degree is designed for students who intend to become professional geologists and/or those who plan to attend graduate school in geosciences. The program includes courses normally expected of graduate school applicants and prepares students for the examination for professional geologic registration licensing.
- The Bachelor of Arts degree is designed for students who seek a degree in the geological sciences as a foundation for careers in a variety of areas. This option leverages the strongly interdisciplinary socially relevant aspects of the science. The B.A. program includes a broad spectrum of courses, and focuses both on information about the earth and on how society makes decisions that affect the earth system. The Bachelor of Arts degree in Applied Arts and Sciences meets the requirements of the California Community College Associate in Science (AS-T) in Geology for Transfer degree students completing the Transfer Model Curriculum (TMC).


## Impacted Program

The geological sciences major and emphases are impacted programs. To be admitted to the geological sciences major or an emphasis, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Geological Sciences Major

With the B.S. Degree in Applied Arts and Sciences

## (Major Code: 19141)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." All required upper division courses must be taken for letter grades only, not credit/no credit.

Courses to satisfy the requirement of 36 or more upper division units in the major may be selected from upper division geological sciences courses not explicitly excluded. Students may petition the department to include courses from other disciplines to complete the upper division major requirement.

A minor is not required with this major.

## Emphasis in General Geology <br> (SIMS Code: 775324)

Preparation for the Major. Oceanography 100, or Geological Sciences 100 and 101, or Geological Sciences 101 and 104; Geological Sciences 200, 205, 221; Biology 100, 100L; Chemistry 200, 201; Mathematics 150, 151; Physics 195, 195L, 196, 196L. (44 units)

Recommended: Physics 197, 197L; Mathematics 252.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 37-39 upper division units in approved courses to include Geological Sciences 300, 306, 307, 324, 336, 508,530 ; and 12 additional upper division units from geological sciences (upper division courses from outside department by approval).

## Emphasis in Engineering Geology (SIMS Code: 775313)

Preparation for the Major. Oceanography 100, or Geological Sciences 100 and 101, or Geological Sciences 101 and 104; Geological Sciences 205, 221; Chemistry 200; Aerospace Engineering 200 [or Mechanical Engineering 200]; Mathematics 150, 151, 252; Physics 195, 196, 197. (40 units)

Recommended: Civil Engineering 218; Physics 195L, 196L, 197L.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 38 upper division units in approved courses to include Geological Sciences 300, 306, 307, 324, 336, 508 (4 units); Civil Engineering 301 or Mechanical Engineering 304, Civil Engineering 462, 463; nine upper division units selected from Geological Sciences 498A, 498B, 514, 530, 550, 551, 560 or Civil Engineering 465; or other upper division courses approved by the department.

## Emphasis in Environmental Geosciences <br> (SIMS Code: 775318)

Preparation for the Major. Oceanography 100, or Geological Sciences 100 and 101; or Geological Sciences 101 and either Geological Sciences 104 or Environmental Science 100 [or Sustainability 100]; Geological Sciences 200, 221; Biology 100, 100L; Chemistry 200, 201, Chemistry 232 and 232L, or 251; Mathematics 124 or 150; Physics 180A, 180B, 182A, 182B. (40-41 units)

Recommended: Geological Sciences 205, Statistics 250.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 39 upper division units in approved courses to include Geological Sciences 306, 307, 324, 336, 505, $514,530,551$; and 12 upper division units selected from Geological Sciences 300, 303, 305, 498A, 498B, 499, 508 (4 units), 521, Environmental Science 301, Geography 370, Philosophy 332 [or Sustainability 332], Political Science 334 [or Sustainability 334].

## Emphasis in Geophysics

(SIMS Code: 775346)
Preparation for the Major. Oceanography 100, or Geological Sciences 100 and 101, or Geological Sciences 101 and 104; Geological Sciences 200, 221; Chemistry 200; Mathematics 150, 151, 252; Physics 195, 195L, 196, 196L, 197, 197L. Aerospace Engineering 280 must be taken if student selects Aerospace Engineering 515 and/or Electrical Engineering 340 in the major. (39 units)

Recommended: Geological Sciences 205, Statistics 250.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36-39 upper division units in approved courses to include Geological Sciences 300, 306, 307, 324, and 560; Mathematics 342A and 342B, or Aerospace Engineering 515; two courses selected from Geological Sciences 336, Physics 350*, Physics 400A* (or Electrical Engineering 340*); and nine upper division units of approved courses in geological sciences at the 500-level.

[^13]
## Emphasis in Hydrogeology (SIMS Code: 775357)

Preparation for the Major. Oceanography 100, or Geological Sciences 100 and 101, or Geological Sciences 101 and 104; Geological Sciences 205, 221; Biology 100; Chemistry 200, 201; Mathematics 150, 151, 252; Physics 195, 196, 197. (45 units)

Recommended: Geological Sciences 200, Physics 195L, 196L, 197L.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units in approved courses to include Geological Sciences 300, 306, 307, 324, 336, 508 (4 units), 514 or 530, 551; and eight upper division units of departmentally approved courses.

## Emphasis in Paleontology

## (SIMS Code: 775390)

Preparation for the Major. Oceanography 100, or Geological Sciences 100 and 101; or Geological Sciences 101 and either Geological Sciences 104 or Environmental Science 100 [or Sustainability 100]. Geological Sciences 200, 205, 221; Biology 203, 203L, 204, 204L, 215; Chemistry 200, 201; Mathematics 124 or 150; Physics 180A, 182A. (43 units)

Recommended: Physics 180B and 182B.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units in approved courses to include Geological Sciences 306, 324, 336, 508 (4 units); Biology 352, 354; and 15 upper division units of departmentally approved courses.

## Geological Sciences Major

With the B.A. Degree in Applied Arts and Sciences

## (Major Code: 19141) (SIMS Code: 775311)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A minor is not required with this major.
Preparation for the Major. Oceanography 100, or Geological Sciences 100 or 104, and 101; Geological Sciences 200, 205. Mathematics 150 and 151, or any two of the following: Astronomy 101, Computer Science 100, Mathematics 141, 150, Physics 180A, 195, 196, Statistics 250. One of the following pairs: Chemistry 200 and 201, or Chemistry 100 and Biology 100 or 101, or Chemistry 200 and Biology 100 or 101. (24-29 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 24 upper division units in approved courses to include Geological Sciences 303, 336, 505, Oceanography 320, and 12 additional units selected from Geological Sciences 301, 305, 306, 324, 412, 496, 499, 505, 508, 514, 521, 530, 550, 551, 560, 580; Anthropology 302, 360, 471; Biology 315, 324, 327; Chemistry 300; Economics 455, 456; Environmental Engineering 320, 355; Environmental Science 301; Geography 370; History 441; Journalism and Media Studies 300, 440, 494; Political Science 334 [or Sustainability 334], 564; Philosophy 332 [or Sustainability 332]; Public Administration 320, 485; Public Health 304, 331; Recreation and Tourism Management 305, 483. Students should consult with the undergraduate adviser in developing a program of study in support of career goals.

## Geological Sciences Minor

## (SIMS Code: 775301)

The minor in geological sciences consists of a minimum of 17 units in geological sciences, nine of which must be in upper division courses. Courses include Oceanography 100 or Geological Sciences 100 or 104; and 101, 205; and nine units selected from Geological Sciences 301, 303, 305; Oceanography 320.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Oceanography Minor

For a listing of requirements refer to the section of this catalog on Oceanography.

## Courses (GEOL)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

GEOL 100. Planet Earth (3) [GE]
Earth's global systems. Plate tectonics, earthquakes, and volcanoes; evolution of our planet and life through geologic time; economic resources including fossil fuels and precious minerals; agents of erosion that shape the land.

## GEOL 101. Dynamics of the Earth Laboratory (1) [GE]

Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Geological Sciences 100, 104, or Environmental Science 100 [or Sustainability 100].

Hands-on experience with land forms, rocks, minerals, topographic maps, and aerial photographs. Includes demonstrations and field trips. Designed to accompany and augment Geological Sciences 100 or 104.

## GEOL 104. Earth Science (3) [GE]

Earth's four principal reservoirs and their interconnectedness: solid earth, ocean, atmosphere, and biosphere. How humanity affects and is affected by these reservoirs. Most appropriate for liberal studies majors.
GEOL 200. Geologic Inquiry and Problem Solving (3)
Two lectures and three hours of laboratory.
Prerequisites: Oceanography 100; or Geological Sciences 100 and 101; or Geological Sciences 101 and either Geological Sciences 104 or Environmental Science 100 [or Sustainability 100].

Guided inquiry field and laboratory approach to solution of geologic problems. Written reports and oral presentations. Required weekend field trips.

## GEOL 205. Historical Geology (4)

Three lectures and three hours of laboratory. Arrangement for field study during the semester.

Prerequisites: Oceanography 100; or Geological Sciences 100 and 101; or Geological Sciences 101 and 104.

Evolutionary history of earth as traced through rock and fossil records. Stratigraphic and depositional concepts.

## GEOL 221. Mineralogy (3)

Two lectures and three hours of laboratory.
Prerequisites: Oceanography 100; or Geological Sciences 100 and 101; or Geological Sciences 101 and either Geological Sciences 104 or Environmental Science 100 [or Sustainability 100]. Credit or concurrent registration in Chemistry 200. Recommended: Geological Sciences 200.

Practice in determination of common minerals; their geologic environment, utilization, and economic significance. Introduction to optical techniques in mineral identification.

## GEOL 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

GEOL 300. Geological Data Analysis (3)
Two lectures and three hours of laboratory.
Prerequisite: Credit or concurrent registration in Mathematics 150.

Theory and techniques of geological data analysis. Elementary programming to model statistical processes. Statistical inference, error propagation, plotting, and curve fitting using geological examples.
GEOL 301. Geology of National Parks and Monuments (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning. Recommended: Geological Sciences 100.

Geology of a group of national parks and monuments, selected for their geological significance, scenic beauty, and visitor popularity. Not acceptable to the B.S. degree in geological sciences.
GEOL 303. Natural Disasters (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning. Recommended: Geological Sciences 100.

Geologic processes that have dramatically affected the human race: earthquakes, volcanoes, landslides, and floods. Not acceptable to the B.S. degree in geological sciences, except for the emphasis in environmental geosciences.
GEOL 305. Water and the Environment (3) [GE]
Prerequisites: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning. Recommended: Geological Sciences 100 or Geography 101.

Movement of fresh water on earth. Hydrologic cycling of water from precipitation, runoff, infiltration, stream and groundwater flow to the ocean. Problems caused by over-use of water resources, urbanization, and water pollution examined with case studies. Not acceptable to the B.S. degree in geological sciences, except for the emphasis in environmental geosciences.

## GEOL 306. Structural Geology and Field Methods (5)

Two lectures and three hours of laboratory and six weekends in the field.

Prerequisites: Geological Sciences 324; algebra, trigonometry, and at least high school physics. Highly recommended: First semester college physics.

Integrates structural and introductory field geology. Principles, causes, and mechanisms of rock deformation combined with field study. Graphical, computer, and analytical techniques for working with folds and faults are applied in the field. Field observations are presented in geologic maps, cross sections, and reports.
GEOL 307. Geophysics and Field Methods (4)
Two lectures and three hours of laboratory and a minimum of three weekends in field during semester.

Prerequisites: Geological Sciences 306; Mathematics 124 or 150; Physics 180A or 195.

Principles and field studies of gravity, magnetic, and seismic techniques applied to structure, dynamics, and shallow environment of the earth. Computer-aided data reduction and interpretation.

## GEOL 324. Petrology (3)

Two lectures and three hours of laboratory.
Prerequisite: Geological Sciences 221.
Composition, classification, occurrence, and origin of igneous, sedimentary, and metamorphic rocks. Identification of rocks in hand specimen; petrographic analysis of rocks in thin section; modeling and interpretation of petrologic data.

## GEOL 336. Sedimentology and Lithostratigraphy (3)

Two lectures and three hours of laboratory.
Prerequisites: Geological Sciences 200 (not required but recommended for emphases in engineering geology and hydrogeology) and Geological Sciences 205 (not required but recommended for emphases in environmental geosciences and geophysics).

Sedimentologic description and interpretation of the textures and structures of sediments and sedimentary rocks. Stratigraphic analysis of stratal succession, age relationships, and correlation on local and global scales.

GEOL 412. Processes and Inquiry in the Earth Sciences (4) Three lectures and two hours of activity.
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning.

Investigation of processes of inquiry and rational thinking skills characteristic of the earth sciences.

## GEOL 496. Selected Topics in Geology (1-4)

Prerequisite: Consent of instructor.
Selected topics in geology and related earth sciences. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.
GEOL 498A. Research Methods and Communication (1) $\mathrm{Cr} / \mathrm{NC}$
Prerequisites: Nine upper division units in geological sciences. Cumulative 3.0 GPA and consent of instructor. Proof of completion of prerequisites required: Copy of transcript.

Development and testing of scientific hypotheses and their effective communication through oral, written, and visual modes. To be taken prior to registration in Geological Sciences 498B.

## GEOL 498B. Senior Thesis (2)

Prerequisite: Consent of instructor.
Individual research project, written thesis, and oral presentation done under supervision of professor chosen by student.

## GEOL 499. Special Study (1-4)

Prerequisites: Acceptable grade average in at least 12 upper division units within the major and consent of staff.

Individual study in field, library, laboratory, or museum work. Maximum credit four units.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

GEOL 505. Imaging and GIS in Disaster Response (3)
Two lectures and three hours of laboratory.
Prerequisite: Geological Sciences 200 or enrollment in homeland security program.

Imaging and Geographic Information Systems applications in disaster management.

## GEOL 508. Advanced Field Geology (4 or 6)

One lecture and three hours of laboratory plus 28 days in the field. For the option with six units: two additional weeks of field or laboratory work.

Prerequisite: Geological Sciences 306.
Investigation of individually assigned areas, preparation of geologic maps, geologic sections, and gathering other types of data, e.g., petrologic, geophysical, or paleontologic, as appropriate. Students are responsible for cost of food and transportation. Students must demonstrate the physical ability to adequately and safely perform fieldwork under varying weather conditions; in steep, uneven or rocky terrain; for long periods of time.

## GEOL 514. Process Geomorphology (3)

Two lectures and three hours of laboratory.
Prerequisite: Geological Sciences 306.
Processes shaping and affecting the earth's surface, and application of resultant land forms in interpretation of geologic structure, stratigraphy, and neotectonics.
GEOL 521. Petroleum Geology (3)
Prerequisite: Geological Sciences 336.
History of petroleum exploration; statistics of energy use; principles of well logging; theories of petroleum generation, migration, and accumulation; exploration and production techniques; case studies of important oil fields.
GEOL 530. Geochemistry (3)
Two lectures and three hours of laboratory.
Prerequisites: Geological Sciences 324; credit or concurrent registration in Chemistry 201; Mathematics 124 or 150.

Fundamental principles of low- and high-temperature geochemistry. Origin of the elements; formation of the solar system; differentiation of the earth; weathering at the earth's surface; chemistry of natural waters. Laboratory methods applied to geological problems.

GEOL 538. Notable Historic Earthquakes (3)
Two lectures and three hours of laboratory.
Prerequisite: Geological Sciences 300.
Earthquake magnitude, fault source physics and rupture mechanisms, earthquake location and ground motion estimation, geotechnical aspects, earthquake triggering and geodesy.

## GEOL 550. Engineering Geology (3)

Two lectures and three hours of laboratory.
Prerequisite: Geological Sciences 306.
Relationships between geologic processes and works of humans. Topics include rock and soil mechanics, ground water flow, slope stability, seismicity, land subsidence, and evaluation of geologic materials with respect to dam sites, tunnel alignments, and building foundations.

## GEOL 551. Hydrogeology (3)

Two lectures and three hours of laboratory.
Prerequisites: Geological Sciences 306 and Mathematics 124 or 150.

Theory of ground water flow. Exploration for and development of the ground water resource. Aquifer tests, water quality, and water resource management. Occurrence of water in alluvial, sedimentary, volcanic, plutonic, and metamorphic terrains.

## GEOL 560. Earthquake Seismology (3)

Two lectures and three hours of laboratory.
Prerequisites: Mathematics 252, Physics 197. Recommended: Mathematics 342A.
Theory of seismic wave excitation, propagation, and recording. Methods of seismogram interpretation and analysis. Applications to tectonics and earthquake hazard analysis.

## GEOL 580. Seismic Interpretation and 3D Visualization (3)

Two lectures and three hours of laboratory.
Prerequisite: Geological Sciences 306.
Computer-based seismic interpretation, mapping, and modeling in both 2D and 3D. Overview of basic seismic processing. Emphasis on industrial applications, both petroleum and shallow geotechnical.

## GEOL 587. Volcanology (3)

Prerequisite: Geological Sciences 324.
Magma and magma chamber properties. Eruptive mechanisms, volcano types, and a variety of volcanic phenomena associated with Hawaiian, Strombolian, Plinian, Vulcanian, and hydrovolcanic eruptions. Volcanic phenomena applied to classic and historic eruptions. (Formerly numbered Geological Sciences 687.)

## GEOL 596. Advanced Topics in Geology (1-4)

Prerequisite: Consent of instructor.
Advanced special topics in the geological sciences. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

## German

In the Department of European Studies
In the College of Arts and Letters

OFFICE: Storm Hall 224A
TELEPHONE: 619-594-6313 / FAX: 619-594-8006
E-MAIL: german.coord@sdsu.edu
WEBSITE: http://german.sdsu.edu
Faculty
Emeritus: Skwara, Wauchope
Chair: Donadey (Interim)
Professor: Schulze
Associate Professor: Rebien
Lecturers: Guzman, Sadegholvad
Offered by the Department of European Studies
Major in German with the B.A. degree in liberal arts and sciences.
Emphasis in German studies.
Major in European studies with emphasis in German.
See European Studies.
Minor in German.

## Offered by International Business

Major in international business, with emphasis in German.

## The Major

The German language is widely spoken in many countries today. It is also a primary language of scholarship in such diverse fields as art, chemistry, electronics, history, linguistics, medicine, military science, the natural sciences, photography, and physics.

Students who major in German will gain proficiency in German language skills, and the department offers a broad variety of courses designed to prepare majors for a number of careers after graduation. A major in German is also a good preparatory curriculum for graduate programs in such areas as international law, international trade, journalism, librarianship, and public administration.

A knowledge of German is a valuable asset in finding positions with government agencies, internationally oriented companies, media outlets, and the tourism industry, and as interpreters and translators employed by the federal government, international conferences, publishers, trade councils, and the United Nations.

The German major with an emphasis in German studies offers extensive preparation in the German language while providing students with a broad, interdisciplinary understanding of the history, culture, and society of the countries of Central Europe where German is spoken. This emphasis provides excellent preparation for careers as area specialists for private businesses and agencies or for positions at international organizations, with the federal government, or in cultural institutions.

Students majoring in German are strongly encouraged to participate in California State University International Programs (CSU-IP) and other approved study abroad programs in German-speaking countries. Students also have the option of pursuing a double major in another area of study.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Impacted Program

The German major and emphasis are impacted programs. To be admitted to the German major or emphasis, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## German Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 11031) (SIMS Code: 113101)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in German courses can apply to the degree.

Students majoring in German must complete a minor in another field to be approved by the departmental adviser in German.

Preparation for the Major. German 100A, 100B, 202, 205A, 205B. (21 units)

Language Requirement. The language requirement is automatically fulfilled through coursework for preparation for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience Requirement. All German majors are required to complete an approved study abroad program in a German-speaking country consisting of a minimum of six units (90 hours). However, German majors are strongly encouraged to complete a more extensive abroad experience by participating in a semester or an academic year program. To fulfill the International Experience Requirement, German majors must enroll in a study abroad program approved by the department. Unapproved study abroad programs will not meet the international experience requirement for the major.

Major. A minimum of 27 upper division units to include German $300,301,304,400,430$, and 12 units in upper division German. No more than one German course taught in English can apply to the major.

## Emphasis in German Studies

## (SIMS Code: 113120)

No minor is required with this emphasis.
Preparation for the Major. German 100A, 100B, 150, 202, 205A and 205B. (24 units)

Language Requirement. The language requirement is automatically fulfilled through coursework for preparation for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 30 upper division units to include German 300,301 , and 410 or 411; six units of electives in German; 12 units (no more than six units in any one department) selected from Economics 330, Geography 336, History 440, 527, Humanities 408, Philosophy 505, Political Science 356; and three units of electives selected with approval of department adviser.

## German Minor

## (SIMS Code: 113101)

The minor in German consists of a minimum of 15 units taught in German, nine units of which must be in upper division German courses. Any course taught in English needs department approval to apply to the minor requirements (German 320 is acceptable for the German minor).

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Language Requirement for the

## B.A. Degree in Liberal Arts and Sciences

Students electing the study of German to fulfill the language requirement for the bachelor of arts degree in liberal arts and sciences must successfully complete German 202 or 205A or 205B or the equivalent level of achievement. The usual sequence of coursework is German 100A, 100B, 202, 205A, and 205B. Refer to section of catalog on "Graduation Requirements" for additional ways to satisfy competency.

## High School Equivalents

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:

1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

## Courses (GERMN)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

Native speakers of German will not receive credit for taking lower division courses in German except with advance approval from the department.

All lower division courses in German are taught in German unless otherwise stated.

No credit will be given for lower division courses taken after successfully completing any upper division German course taught in German.

No credit will be given for German 100A, 100B, 205A, 205B taken out of sequence. German 202 may be taken concurrently with German 205A or 205B.
GERMN 100A. First Course in German (5) [GE]
Pronunciation, oral practice, readings on German culture and civilization, minimum essentials of grammar.
GERMN 100B. Second Course in German (5) [GE]
Prerequisite: German 100A or two years of high school German. Continuation of German 100A.
GERMN 150. Contemporary German Culture and the New Europe (3) [GE]
Introduction to fundamental questions of identity and belonging in contemporary German culture; investigation of Germany's place within the European Union and cultural responses to the process of European integration. Taught in English.
GERMN 202. Readings in German (3) [GE]
Prerequisite: German 100B.
Reading comprehension through intermediate-level cultural materials. May be taken concurrently with German 205A or 205B.
GERMN 205A. Third Course in German (4) [GE]
Four lectures and one hour of laboratory.
Prerequisite: German 100B or three years of high school German.
Continuation of German 100B. Practice of all language skills at intermediate level.
GERMN 205B. Fourth Course in German (4) [GE]
Four lectures and one hour of laboratory.
Prerequisite: German 205A.
Continuation of German 205A. Practice of all language skills at intermediate level.

## GERMN 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
All upper division courses in German are taught in German unless otherwise stated.

## GERMN 300. Readings in Contemporary German

Culture (3) [GE]
Prerequisites: German 202 and 205B.
Development of advanced proficiency in reading comprehension and oral communication through use of cultural materials. Not open to students who hold a degree from a secondary or post-secondary school in which the primary language of instruction is German.
GERMN 301. Grammar and Composition (3) [GE]
Prerequisites: German 202 and 205B. Proof of completion of prerequisites required: Copy of transcript.

Grammar and stylistics; intensive writing practice; reports based on outside reading. Not open to students who hold a degree from a secondary or post-secondary school in which the primary language of instruction is German.
GERMN 304. Phonetics of Spoken German (3)
Three lectures and one hour of laboratory.
Prerequisites: German 202 and 205B.
Sounds and intonation of German.
GERMN 320. German Film (3) [GE]
Two lectures and two hours of activity.
Masterpieces of German film. Emphasis on social, political, and cultural changes in modern Germany. Taught in English.

## GERMN 400. German Studies Through the Media (3)

Prerequisite: German 300 or 301.
Society and institutions of German-speaking regions through spoken and written texts from the media. Emphasis on topics of importance for business, communications, and German area studies.

## GERMN 410. German Studies I (3)

Prerequisites: German 202 and 205B.
Methods of German studies as applied to study of culture of Ger-man-speaking communities from Middle Ages to beginning of second empire, while building on advanced German language skills.

## GERMN 411. German Studies II (3)

Prerequisites: German 202 and 205B.
Methods of German studies as applied to study of culture of Ger-man-speaking communities from second German empire through German reunification, while building on advanced language skills.

## GERMN 430. German Civilization (3)

Prerequisites: German 202 and 205B.
Artistic, intellectual, and cultural movements of the Ger-man-speaking regions, while building on advanced language skills. May be repeated with new title and content. Maximum credit six units.

## GERMN 435. German Politics (3)

Prerequisites: German 202 and 205B.
Key institutions in the German political system. Contemporary debates on culture, economics, environmental policy, identity, migration, and the welfare state. Germany's contributions to the European Union and the world.

GERMN 495. German Internship (3) Cr/NC
Prerequisites: Upper division standing in major and consent of instructor.

Practical work experience in a field related to German studies. Work done under joint direction of activity sponsor and instructor. Approved international internships may count towards international experience requirement for major.

## GERMN 496. Experimental Topics (1-4)

Prerequisite: German 300 (for literary topics) or 301 (for linguistics topics).

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.
GERMN 499. Special Study (1-3)
Prerequisites: Fifteen upper division units in the major with an average of $B(3.0)$ or better and consent of instructor. Proof of completion of prerequisites required: Copy of transcript.

Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
GERMN 520. Modern German Literature (3)
Prerequisites: German 300 and 301.
Major authors and genres since Enlightenment.

## GERMN 575. Seminar in German Studies (3)

Prerequisites: Two upper division German courses.
Directed research on topics in German studies. See Class Schedule for specific content. May be repeated with new title and content. Maximum credit six units.
GERMN 596. Topics in German Studies (3)
Prerequisites: German 300 and 301. Proof of completion of prerequisites required: Copy of transcript.

Topics in German language, literature, or linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

## Refer to the Graduate Bulletin.

# Gerontology 

In the School of Social Work<br>In the College of Health and Human Services

## OFFICE: Hepner Hall 119

TELEPHONE: 619-594-6865 / FAX: 619-594-5991
Faculty
Emeritus: DuBois, Harbert, Stanford
Director: Min
Professors: Garrett, Min
Associate Professors: Ko, Li
Offered by the School of Social Work
Master of Science degree in gerontology.
Major in gerontology with the B.A degree in
liberal arts and sciences.
Minor in gerontology.
Certificate in applied gerontology
(offered only through SDSU Global Campus).

## The Major

Gerontology concerns itself with the study and application of knowledge about the physical, social, and economic conditions of older people. Since the process of aging touches all aspects of human activity, gerontology is interdisciplinary in nature. Gerontology is becoming a major area of research in the biological, behavioral, and social sciences. With a rapid increase of older people, has come a growing need for more trained professionals to apply new knowledge about the elderly. Such knowledge is needed for planning and developing programs and services which improve the quality of life for older Americans.

Gerontological training and research is an important link in meeting the social, physical, and psychological needs of the elderly. Students of gerontology benefit through the personal understanding of their own aging process. Those wishing to pursue careers in aging will find many exciting opportunities for serving the elderly in a variety of settings.

It is through research, teaching, and community involvement that faculty members from numerous disciplines provide for the intellectual development of students, the enhancement of community programs, and the assurance of a better quality of life for older people in the community, the state, and the nation.

## Program Goals

- Provide academic programs and experiences through courses and field experiences, leading to an undergraduate degree in a major and minor in gerontology.
- Provide interdisciplinary education and training that meet the diverse needs of older people in California and in the U.S.
- Prepare students as generalist gerontologists for careers in a variety of gerontological settings such as senior centers, senior service organizations, area and state agencies on aging, supportive senior housing, public, non-profit and corporate settings, health and long term care facilities.
- Provide students with knowledge of aging network and programs on the local, state, and federal level.
- Provide students with knowledge and skills to identify and understand stereotypes and attitude toward older adults, and emphasize their places and contributions in society.
- Prepare students with knowledge needed in describing, assessing and critiquing various programs, interventions and services designed for older adults.
- Prepare students to meet the needs of older adults with cultural competence regarding age, gender, race and ethnicity, and/or diverse abilities.
- Prepare students for evidence-based practice with older adults with appropriate research methods to develop, implement, and evaluate the aging programs and services.


## Program Outcomes

- Describe the process of physical (biological), psychological, social aging, and related theories of aging.
- Know about the diverse needs of the older population in terms of age, gender, race and ethnicity, and/or diverse abilities.
- Demonstrate knowledge of the aging network consisting of programs and policies for the aging population.
- Describe and understand own attitudes toward and beliefs about old age and older adults, and reflect and analyze stereotypes or attitudes towards old adults in the portrayal of aging by society.
- Understand basic concepts of research methods necessary to describe and discuss efficacy and effectiveness of the services and program for older adults as guided and informed by empirical evidence.
- Develop effective written, oral, and interpersonal communication skills with individuals, caregivers, families, and community through professional field experiences.
- Demonstrate case management skills such as interviewing, assessment, and report writing.
- Demonstrate knowledge and understanding necessary to describe, assess, and critique various programs, interventions and services to meet the needs of the growing aging population.
- Demonstrate knowledge and skills necessary to advocate for the needs of older adults and their families by engaging in policy formation, implementation, and analysis.
- Understand the ethical complexities that surround issues with respect to aging.


## Advising

All College of Health and Human Services majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first semester after declaration or change of major.

## Retention Policy

The College of Health and Human Services expects that all gerontology majors will make reasonable academic progress towards the degree. Gerontology premajors who have completed major preparatory courses, earned 60 units, but have less than a 2.0 GPA may be removed from the premajor and placed in undeclared.

## Impacted Program

The gerontology major is an impacted program. To be admitted to the gerontology major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Gerontology Major

With the B.A Degree in Liberal Arts and Sciences
(Major Code: 12043) (SIMS Code: 551902)
All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in gerontology courses can apply to the degree.

A minor is not required with this major
Preparation for the Major. Gerontology 101, 250; Biology 100; Child and Family Development 135; Psychology 101; Public Health 101; and Social Work 110. (21 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to the section of this catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. All gerontology majors are required to participate in a pre-approved international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course will be substituted). Specific details can be found at http://chhs.sdsu.edu/ international/.

To meet the international experience requirement, majors must complete one of the following:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;

OR
5. One course selected from:

- Health and Human Services 290 or 350;
- Asian Studies 490;
- Education 450;
- General Studies 450;
- International Security and Conflict Resolution 450;
- Latin American Studies 320, 450, or 550;
- Political Science 450;
- Public Health 550;
- Science 350.

Major. A minimum of 36 upper division units to include Gerontology 310, 360, 370, 380, 400A, 520, Social Work 381, 391; and 12 units selected with approval of the adviser from Gerontology 400B, 496, 499, and 596 (when appropriate); Communication 321, Exercise and Nutritional Sciences 433; General Studies 420; Psychology 380; Public Health 362, Social Work 382*, 483A*.

## *Prerequisites waived

## Gerontology Minor

## (SIMS Code: 551901)

The minor in gerontology consists of a minimum of 18 units selected from Gerontology 101, 310, 360, 370, 380, 400A, 499, 520, 596; Exercise and Nutritional Sciences 433; General Studies 420; Psychology 380; Social Work 120, 381.

Additional prerequisites may be required for the courses in the minor.

Courses in the minor may not be counted toward the major or the certificate, but may be used to satisfy preparation for the
major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Applied Gerontology Certificate

(Offered only through SDSU Global Campus)

## (SIMS Code: 551903)

This program is designed for persons working in the field of aging as well as those interested in obtaining employment in the aging field. Completion of the certificate program will enable participants to assume greater responsibility by broadening their knowledge of and skill in this specialty area. More specifically, the program is designed to provide the following:

1. A broad knowledge base in the bio-psycho-social aspects of aging.
2. Practical knowledge and skills in the application of this information towards services for older people.
3. Knowledge of government programs and program planning and evaluation techniques.
4. Knowledge of programs and services operating in local areas as well as gaps which exist in local programming.
5. Knowledge and skills needed to function in an advocacy capacity to improve services to the elderly.

## Certificate Requirements:

1. Complete 18 semester units of coursework with a grade point average of 2.0 or better.
2. Complete coursework within four years after admission to the program.
3. Petition SDSU Global Campus for the certificate upon completion of 18 semester units.
To be admitted to the program, students are expected to show by previous coursework and/or experience some evidence of potential for completing the academic program. Previous courses in gerontology taken at SDSU or at other universities will be considered for credit toward certification on an individual basis, but not to exceed nine units.

The School of Social Work is responsible for the coordination of the certificate program in conjunction with SDSU Global Campus. Admission applications may be obtained from SDSU Global Campus. Applications may be submitted prior to entering the program or before the completion of nine semester units of coursework.

Students are required to submit an Open University Registration Form each semester to SDSU Global Campus.
Students accepted into the program will be assigned an adviser by the School of Social Work.

## Required Courses for the Certificate Program

A minimum of 12 semester units must be selected from four of the five following areas inclusive of the practicum:
I. Introduction to Gerontology

Gerontology 101. Introduction to Human Aging (3)
II. Biological Aspects of Aging

Gerontology 310. Biology of Aging (3)
III. Psychological Aspects of Aging

Psychology 350. Abnormal Psychology (3)
IV. Sociological Aspects of Aging

Gerontology 380. Social Issues of Aging (3)
V. Practicum

Gerontology 400A or 400B. Practicum in Gerontology (3) (Cr/NC)
Elective Courses
A minimum of six semester units selected from the following:
Gerontology 360. Diversity and Aging (3)
Gerontology 370. Images of Aging in Contemporary Society (3)
Gerontology 499. Special Study (1-3)
Gerontology 520. Analysis of Programs for the Aging (3)
Gerontology 596. Advanced Special Topics in Gerontology (1-4)
Women's Studies 310. Global Cultures and Women's Lives (3)

## Courses (GERO)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

GERO 101. Introduction to Human Aging (3) [GE]
Overview of field of gerontology, including demographic trends, basic theories, concepts and philosophic ideas, social policies, planning issues, and services available to meet needs and problems of older adults.

## GERO 250. Intergenerational Issues and the Elderly (3)

Controversial issues surrounding interpersonal relations between older adults and other age groups.
GERO 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
GERO 310. Biology of Aging (3)
Prerequisite: Gerontology 101 or 250.
Biological aging processes and impact on development of disease in later life. Age-associated diseases, approaches to prevent or reverse adverse effects of biological aging to promote healthy span, biological aging in various body systems, lifespans, mortality rates and senescence, and theories of aging.
GERO 350. Social Policy and Aging (3)
Prerequisite: Gerontology 101.
Policy development process including analyses, evaluation, and advocacy. Social controversies about aging of populations. Review of U. S. Social Security and Medicare. Analysis of Older Americans Act.
GERO 360. Diversity and Aging (3) [GE]
Prerequisite recommended: Gerontology 101.
Attitudes and cultural values related to aging members of ethnic and minority groups. Influences of class, gender, sexual orientation, economic resources and health on aging process.
GERO 370. Images of Aging in Contemporary Society (3) [GE]
Prerequisite recommended: Gerontology 101.
Impact of current cultural attitudes and values on images of older persons. Influence of media and advertising in creating views and perceptions of aging. Major myths and stereotypes.
GERO 380. Social Issues of Aging (3)
Prerequisite: Gerontology 101 or 250.
Attitudes toward aging shaped through various cultural, media, and social institutions. Interaction of personal social status characteristics with both social institutions and policies. Quality of life for people of all ages.
GERO 400A-400B. Practicum in Gerontology (3-3) Cr/NC
Two hundred hours of internship.
Prerequisites: Gerontology 360, 370, 380.
Integration of theoretical background and practical experience in providing services to elderly. Fieldwork and observation in settings providing services to the elderly. Direct experience in aging projects relevant to their field of interest.

## GERO 402. Aging Network (3)

Prerequisite: Three units in gerontology.
Networks, programs, and services available to older adults in communities. Effectiveness of programs that assist older adults to age successfully.
GERO 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.
GERO 499. Special Study (1-3)
Prerequisite: Consent of department chair. Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
GERO 520. Analysis of Programs for the Aging (3)
Prerequisite: One upper division course in gerontology.
Major programs in aging that support daily functioning of elderly. Effectiveness of programs in serving today's elderly with attention to ethnic and cross-cultural variations.
GERO 596. Advanced Special Topics in Gerontology (1-4)
Advanced selected topics in gerontology. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296,496,596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

## Greek

Refer to "Classics" in this section of the catalog.

## Health and Human Services

## OFFICE: Education 154

TELEPHONE: 619-594-6151 / FAX: 619-594-7103
WEBSITE: http://chhs.sdsu.edu

## International Experience

In recognition of the SDSU Shared Vision goal of a global university and increasing globalization in all sectors of the world and within societies, the College of Health and Human Services international experience for undergraduate students has been established. All College of Health and Human Services majors are required to participate in a pre-approved international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate for two or more weeks (alternatives to the international experience requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course will be substituted). Specific details can be found at http://chhs.sdsu.edu/international/.

To meet the international experience requirement, majors must complete one of the following:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;

OR
5. One course selected from:

- Health and Human Services 290 or 350;
- Asian Studies 490;
- Education 450;
- General Studies 450;
- International Security and Conflict Resolution 450;
- Latin American Studies 320, 450, or 550;
- Political Science 450;
- Public Health 550;
- Science 350.


## Courses (HHS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

HHS 290. International Experience (1)
Practical work experience in a health-related field under direction of activity sponsor and instructor. Approved international internships, research, or volunteer programs may count towards international experience requirement for majors in the College of Health and Human Services only.

## HHS 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSE

(Intended for Undergraduates)
HHS 350. Applied International Health and Human

## Services (3) [GE]

Prerequisite: See Class Schedule for prerequisite(s).
Selected themes in health and human services to include participation in an approved international program. Course taught at SDSU.

# In the Department of Linguistics and Asian/Middle Eastern Languages <br> In the College of Arts and Letters 

OFFICE: Storm Hall West 214
TELEPHONE: 619-594-5268 / FAX: 619-594-4877
WEBSITE: http://hebrew.sdsu.edu

## Faculty

Emeritus: Bar-Lev
Chair: Samraj
Program Coordinator: Shuster
Lecturer: Shuster
Offered by the Department of Linguistics and
Asian/Middle Eastern Languages
Courses in Hebrew.
Major or minor work in Hebrew is not offered.

## Language Requirement for the

## B.A. Degree in Liberal Arts and Sciences

Students electing the study of Hebrew to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Hebrew 201 or the equivalent level of achievement. The usual sequence of coursework is Hebrew 101 (with 100), 102, and 201. Refer to section of catalog on "Graduation Requirements" for additional ways to satisfy competency.

Students who speak a little Hebrew (whether from formal studies or from other sources, such as parents or residence in Israel) should consult faculty for correct placement before classes begin.

## High School Equivalents

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:

1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

## Courses (HEBRW)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

All lower division courses in Hebrew are taught in Hebrew.
No credit will be given for Hebrew 101, 102, 201 taken out of sequence.

## HEBRW 100. Hebrew Alphabet (1)

Study of Hebrew alphabet; practice with reading and comprehending whole texts (without vowels), as well as pronouncing. Intended for students of Hebrew 101 who have not previously studied the alphabet. May also be taken without Hebrew 101. Does not satisfy language requirement.
HEBRW 101. Elementary Hebrew I (4) [GE]
Four lectures and one hour of laboratory.
Beginning reading, writing, and conversational skills. Essentials of grammar. First course in Hebrew, intended for those without prior knowledge of Hebrew. Students who speak some Hebrew should consult with the faculty for correct placement before classes begin.
HEBRW 102. Elementary Hebrew II (4) [GE]
Four lectures and one hour of laboratory.
Prerequisite: Hebrew 101.
Continuation of Hebrew 101.

HEBRW 201. Intermediate Hebrew (4) [GE]
Four lectures and one hour of laboratory.
Prerequisite: Hebrew 102.
Continuation of Hebrew 102. Applications of grammar and reading skills. Additional practice in conversation.

## HEBRW 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
All upper division courses in Hebrew are taught in Hebrew unless otherwise stated.

## HEBRW 496. Topics in Hebraic Studies (1-4)

Topics in Hebraic language, literature, culture, and linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit eight units. May be taught in English.
HEBRW 499. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units. May be taught in English.

OFFICE: Arts and Letters 588
TELEPHONE: 619-594-5262 / FAX: 619-594-2210
WEBSITE: http://history.sdsu.edu/

## Faculty

Emeritus: Baron, Bartholomew, Jr., Cheek, Christian, Chu, Cobbs, Colston, Cox, Cunniff, Dunn, Ferraro, Filner, Flemion, Hamilton,
Heinrichs, Heyman, Hoidal, Kushner, McDean, O’Brien, Polich,
Smith, C., Smith, R., Starr, Stites, Stoddart, Vartanian, Webb
Chair: Beasley
Professors: Asselin, Beasley, Blum, DeVos, Edgerton-Tarpley,
Elkind, Kornfeld, Kuefler, Nieves, Pollard, Wiese
Associate Professors: Ben, Cline, Kazemi, Passananti, Penrose, Putman, Yeh
Assistant Professor: Frieberg
Lecturers: Abman, Dibella, Gastil, Harris, Hernandez, Hillman, Kaffenberger, Keller Lapp, Mahdavi-Izadi, Nobiletti, Parker, Sheehan, Tarpley, Weeks

## Offered by the Department

Master of Arts degree in history.
Major in history with the B.A. degree in liberal arts and sciences. Minor in history.

## The Dwight E. Stanford Chair in American Foreign Relations

A gift from alumnus Dwight E. Stanford, who earned a bachelor's degree in American history in 1936 from San Diego State College (now SDSU), established The Dwight E. Stanford Chair in American Foreign Relations. The current appointee to the chair is Dr. Pierre Asselin, a distinguished scholar-teacher who is an expert on U.S. interventions in the Third World, Southeast Asia, and the global Cold War. He is a leading international authority on the Vietnam War and regularly travels to Vietnam for research.

## The USS Midway Chair in Military History

The USS Midway Chair was established by a major donation from the USS Midway Foundation in 2019 to support scholarship and teaching on the role of the American military as an instrument of state power around the world since 1940. The inaugural holder of the chair is expected to assume the position in the 2020-2021 academic year.

## The Nasatir Professor of Modern Jewish History

The Nasatir Professorship was established in honor of the late Professor Abraham Nasatir, a specialist in European colonial history in North America. Nasatir taught history at SDSU for 46 years and was active in the community as an advocate of Jewish education. The Professorship was held by Dr. Lawrence Baron, Professor Emeritus, and a distinguished scholar of European intellectual history and Holocaust studies, from 1988 until 2012.

## The Major

History is the study of humanity's past, encompassing aspects of human existence from play to politics, religion to revolution, war to the arts. History matters because it increases knowledge and develops intellectual skills, including collecting and evaluating evidence, analyzing and interpreting historical behavior, recognizing the diversity of human experience across time and place, and applying historical insights to self-transformation and civic participation. Students learn to convey information to diverse audiences, to do collaborative work and independent research, to question creatively, to read closely, to think critically, and to write effectively. Graduates are equipped for careers in archival work, business, diplomacy, government, journalism, law, museum and curatorial work, politics, and publishing. History prepares students for an active, engaged, and informed life. Opportunities in teaching from the primary to university levels exist for history majors who continue their education in graduate school.

The specialization in history for teachers is intended for students who aspire to become masterful teachers of history/social science. This specialization provides the broad expertise necessary to teach the modern U.S. and world history that is taught in California high schools, and the earlier world history taught in junior high schools, combined with skills in research, writing, contextualization, and analysis of evidence worthy of a history major. This specialization prepares students for graduate school and other history careers while grounding them in the historical knowledge and skills necessary for admittance to credentialing programs in education.

The specialization in public histories develops expertise in the transformative effects of history on communities and public understandings of the past. It integrates cutting edge digital technology with advanced methods in oral history, spatial history, museum studies, archives and preservation, and public engagement. This specialization prepares students for careers in community, local history, and public service organizations, museums, archives, and historic sites, including state and national government park and historical services, as well as for graduate programs in public history, archival and library sciences, and other fields.

The specialization in U.S. history offers the opportunity to explore in depth the history of the society around us and its links to the rest of the world. This specialization trains graduates who are prepared to apply historical skills and understanding to the complex challenges of U.S. society, past and present. It prepares students for careers in law, public service, charitable foundations and non-profit organizations, journalism, and public history settings, and serves as preparation for graduate studies in history, political science, and other fields.

The specialization in world history and global affairs offers a pragmatic and intellectually engaging curriculum for students interested in transregional affairs, past and present. This specialization produces graduates who are true global citizens, by exposing them to diverse cultural legacies and to a range of comparative and transregional world historical approaches. This specialization prepares students for careers in international affairs, diplomacy, the military, intelligence, journalism, and government and non-profit organizations, as well as for entry into graduate programs in world history, anthropology, political science, and other fields. In addition to satisfying the general requirements for history majors, students who select the specialization in world history and global affairs must complete 12 upper division units in a coherent geographical, temporal, or thematic field, in consultation with a faculty adviser; for example, the Mediterranean, the nineteenth century, war and human history, or international relations history.

## Impacted Program

The history major is an impacted program. To be admitted to the history major, students must meet the following criteria:
a. Complete with a minimum GPA of 2.20 and a grade of $C$ (2.0) or better: History 100, 101, and six lower division units of history electives. These courses cannot be taken for credit/no credit (Cr/NC);
b. Complete a minimum of 60 transferable semester units;
c. Have a cumulative GPA of 2.40 or better.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## History Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 22051) (SIMS Code: 113301)
All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in history courses can apply to the degree.

A minor is not required with this major.
Preparation for the Major. History 100, 101, and six lower division units of history electives. (12 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a minimum GPA of 2.20 and a grade of $C$ (2.0) or better in each class.

Language Requirement. Students will be required to successfully complete the third college semester or fifth college quarter or four years of high school in one foreign language to fulfill the graduation requirement. Refer to section of this catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or completing History 390W or another approved upper division writing course (W) with a grade of $C$ (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 30 upper division units in history with at least nine units of 500-level history courses. Students must complete History 400 and three units selected from History 450, 451, 452, 455.

A minimum of three upper division units selected from courses on ancient through early modern history: History 407, 411, 415 [or Latin American Studies 415], 420, 473, 500, 501, 502, 503, 504 [or Humanities 504], 505, 506 [or Humanities 506], 507 [or Religious Studies 507], 508, 550, 566, and, depending on specific content, History 406, 442, 496, 499, 514, 580, 581, 582, 583, 584, 586.

A minimum of three upper division units selected from history courses outside of Europe and the Americas after 1500 CE: History 421 [or Asian Studies 421], 425 [or Asian Studies 425], 474, 516, 567,570,574, and, depending on specific content, History 442, 496, 499, 580, 581, 582, 583, 584, 585, 586.

All students must complete an additional 18 upper division units of electives in history. Students may complete one of the specializations below in partial fulfillment of the 18 unit requirement.
Specialization in History for Teachers: Nine units selected from History 410, 411, 412, 442. See undergraduate adviser in history for requirements to become a California history or social science teacher, to include recommended courses from other departments.
Specialization in Public Histories: Nine units selected from History 445, 451 or 452 (whichever is not completed in the core), 455. Students who select the specialization in public histories must complete a history internship experience to be satisfied by completion of History 452 or an equivalent internship or volunteer experience.
Specialization in U.S. History: Fifteen units selected from History 402, 406, 422 [or Asian Studies 422], 441, 445, 496, $499,532,533,534,535,536,537,539,540$ (offered only at SDSU-IV), 544A, 544B, 548 [or Chicana and Chicano Studies 548], and, depending on specific content, History 435, 442, 580, 581, 582, 583, 584, 585.
Specialization in World History and Global Affairs: Fifteen units in a coherent geographical, temporal, or thematic field, in consultation with a faculty adviser, with three units selected from History 411, 412, 441, 516, 544B, 553 [or Latin American Studies 553], 557, 558, 586. Students who select the specialization in world history and global affairs must also complete an international experience to be satisfied by (1) a

CSU study abroad program, (2) an SDSU exchange program, (3) an SDSU study abroad program, or (4) an SDSU study travel program.
Up to six units from other departments may be applied to the history major upon written approval of the undergraduate adviser.

## History Minor <br> (SIMS Code: 113301)

The minor in history consists of a minimum of 18 units in history to include at least 12 upper division units.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## History Honors Thesis

The department offers undergraduates of superior achievement the opportunity to write a history honors thesis leading to special recognition upon graduation. History 490, Senior Honors Thesis, is open to students who rank in the top 20 percent of senior history majors and who have successfully completed History 400. Interested students should consult the honors thesis adviser in the Department of History.

## Courses (HIST)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

## HIST 100. World History (3) [GE]

Growth of civilizations and interrelationships of peoples of Europe, Asia, Africa, and the Americas to 1500.

## HIST 101. World History (3) [GE]

Modern history from a global perspective, 1500 to present.
HIST 102. World History Through Science and Technology (3) [GE]
Hunter-gatherers and the rise of agriculture to modern globalization of industry and global warming. Interrelationships between cultural changes, scientific theories, and technological advances.

## HIST 105. Western Civilization to the Seventeenth

## Century (3) [GE]

Development of Mediterranean and European cultures, thought, and institutions from ancient times to the seventeenth century.
HIST 106. Western Civilization Since the Sixteenth Century (3) [GE]
Development of European cultures, thought, and institutions from sixteenth century to present.
HIST 109. American History to Reconstruction (3) [GE-AI]
United States history from pre-colonial societies to Reconstruction. Contact of cultures, patterns of settlement, contests over racial, ethnic, religious, class, gender, regional, and national identities and institutions. Satisfies the American Institutions requirement in American history and United States Constitution.

## HIST 110. American History Since the Civil War (3) [GE-AI]

United States history since the Civil War. Development of U.S. economy, urbanization, social and cultural change, emergence of U.S. as a world power, struggles over American identities and institutions. Satisfies the American Institutions requirement in American history and California government.

## HIST 114. Sports in American History (3) [GE]

United States history through the lens of sports over time. Multiple relationships between historical sports and cultural, economic, physical, political, psychological, and social factors.
HIST 125. Sexuality, Past and Present (3) [GE]
How the past shapes the modern physiological, psychological, and sociological sexual self. Censorship and sex, influence of capitalism, religion, and science on sexuality; modern romance, nonconformity, personal sexual identities, gender and sexual roles, the sexual body, sexual liberation, and sexual norms.

## HIST 135. Film as the Past (3) [GE]

Critical analysis of films about history as an art form. Accuracy, aesthetics, authenticity, authorial intentions, collective memory, controversial and uncomfortable topics, empathy, national myths, point of view, popular and critical reception, and revisionism in films about history.

## HIST 150. Why History Matters (3) [GE]

Historically-informed behaviors, contexts, and frameworks through the lenses of contemporary social issues, marking memory through monuments, museum and cultural experiences, politics, and pop-culture.
HIST 157. Comics and History (3) [GE]
(Same course as English 157)
Aesthetics, interplay of texts and images, visual communication, and changes over time.

## HIST 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.
HIST 299. Special Study (3)
Prerequisites: Consent of department chair and instructor. Individual study.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
HIST 390W. Writing in History (3)
Prerequisites: History 100, 101, and six units selected from History $105,106,109,110$. Limited to history majors. Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a grade of C (2.0) or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Practice of different genres of historical writing in one field of history (chosen by instructor), mastery of library skills, citations, academic integrity, source evaluation, pre-writing, and drafting, critiquing, and revising.

## HIST 400. Junior Seminar in Methods and Historiography (3)

Prerequisites: History 100, 101, and six units selected from History 105, 106, 109, 110. Must be a declared history major. Completion of Writing Placement Assessment with a score of 10, or completion of History 390W or another approved upper division writing course (W) with a grade of C (2.0) or better; completion of General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Study and practice of historical methods and historiography through writing and discussion. Historical methods, argumentation, interpretation in one field of history (chosen by instructor). Production of a substantial historiographical essay.
HIST 402. History of Childhood (3) [GE]
Prerequisite: Upper division standing.
Comparative perspective on the history of infancy and early childhood; childrearing theories and practices; adolescence; education; play; work in slavery, servitude, apprenticeship, and families; immigration and migration; domestic violence and family law; and construction of gender and identity.

## HIST 404. History of Human Rights (3) [GE]

Prerequisite: Upper division standing.
Struggles that contributed to wide range of rights in today's international human rights regime in practice and thought and as an institution following the adoption of the Universal Declaration of Human Rights.
HIST 406. History of Sexuality (3) [GE]
Prerequisite: Upper division standing.
Comparative and historical approach to changing conceptions of the body, regulation of sexual practices, and emergence of sexual identities. Historical perspectives on body parts, sexual practices, and sexual celebrities invested with social and political significance.

HIST 407. Early Modern Europe (3) [GE]
Early modern Europe from Renaissance to French Revolution. Social, cultural, economic, political, and intellectual trends, development of nation-states, and sources of continental conflict.

## HIST 408. Modern Europe (3) [GE]

Modern Europe from French Revolution to present. Social, cultural, economic, political, and intellectual trends, development of nation-states, and sources of continental conflict.
HIST 410. United States History for Teachers (3) [GE-AI]
Prerequisites: Upper division standing and Writing Placement Assessment with a score of 8 or above or grade of $C(2.0)$ or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281].

United States history from colonial period to present with emphasis on historiography, bibliography, and relationship between philosophy of history and teaching. Satisfies the American Institutions requirement in American history and California government.

## HIST 411. World History for Teachers (3)

Prerequisites: Upper division standing, Writing Placement Assessment with a score of 8 or above or grade of $C$ (2.0) or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281], and at least three units selected from History 100, 101, 105, 106.

Topics in world history from paleolithic times to sixteenth century emphasizing comparative analysis, interrelations among societies, and large-scale patterns of change. Various approaches to conceptualizing and teaching world history. Intended primarily for students in teacher preparation programs.

## HIST 412. Modern World History for Teachers (3)

Prerequisites: Upper division standing, Writing Placement Assessment with a score of 8 or above, or grade of $C(2.0)$ or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281], and at least three units selected from History 100, 101, 105, 106.

Topics in world history from the beginning of the sixteenth century to the present emphasizing world-scale patterns of change and cross-cultural comparisons. Various approaches to conceptualizing and teaching world history. Intended primarily for students preparing to teach history in secondary schools.
HIST 413. United States History for Teachers for Liberal Studies Majors (3) [GE-AI]
Prerequisites: Upper division standing and Writing Placement Assessment with a score of 8 or above or grade of $C$ (2.0) or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281]. Limited to liberal studies majors.

United States history from pre-colonial period to World War I, incorporating California with emphasis on historiography and relationship between philosophy of history and teaching. Satisfies the American Institutions requirement in American history and United States Constitution. Required of liberal studies majors. Not open to students with credit in History 409.
HIST 415. Pre-Contact and Colonial Latin America (3) [GE]
(Same course as Latin American Studies 415)
Indigenous and colonial history of Latin America, pre-contact through early national period.

## HIST 416. Modern Latin America (3) [GE]

History of Latin America, early national period to present.
HIST 418. History of Modern Britain (3)
Prerequisite: Upper division standing.
History of Britain from seventeenth century to contemporary age. Emphasis on political institutions, religion, society, economy, the arts.
HIST 420. Asian History to 1600 (3) [GE]
Hinduism, Buddhism, Confucianism in Asian family relations, governance, art, and literature. Comparative development of social structure, gender roles, state formation in India, China, and Japan. Interactions among Asian societies via Silk Route and maritime trade.
HIST 421. Asian History Since 1600 (3) [GE]
(Same course as Asian Studies 421)
China, Japan, and India, with case studies on Philippines and Vietnam. Comparative Asian responses to Western imperialism, nationalism, revolution, and war. Diverse Cold War paths; contemporary problems and prospects.

HIST 422. Asian American Experiences (3) [GE-ES]
(Same course as Asian Studies 422)
Prerequisite: Upper division standing.
Experiences of Asian/Pacific Islander Americans to include immigration, colonialism, imperialism, exclusion, citizenship, labor, family, community, gender, popular culture, refugees, multi-racial tensions, globalization, and resistance.
HIST 425. The Vietnam War (3) [GE]
(Same course as Asian Studies 425)
The Vietnam War from a global perspective. The war's evolution in Vietnam and Indochina as well as its implications on socialist nations, the Third World, and the West.

## HIST 435. History Through Film (3)

Critical analysis of selected historical problems, eras, and events, using film as the principal historical document. See Class Schedule for specific content. Maximum credit six units.
HIST 436. Modern Jewish History in Feature Films (3) [GE]
Two lectures and two hours of activity.
Representations of twentieth century Jewish history in feature films. Topics include persecutions of Jews in Czarist Russia and Nazi occupied Europe, social mobility in the United States and national sovereignty in Israel.
HIST 440. The Holocaust and Western Civilization (3) [GE]
Prerequisite: Upper division standing.
German campaign to eliminate Jews during World War II. Anti-semitic background, both Christian and racial; rise of Adolf Hitler and implementation of "the final solution"; responses by Jews and nonJews in the Western world.

## HIST 441. Unnatural Disasters: History of Current Environmental Problems (3) [GE]

Prerequisite: Upper division standing.
Comparative and historical study of current environmental problems in San Diego and the world. Considers the role of religious beliefs, social values, economic practices, and political systems in shaping past attitudes, policies, and behavior toward the environment. International in scope.
HIST 442. People From Our Past (3) [GE]
Biographical approach to history through lives of prominent and ordinary individuals. Topics may include war, community, dissent, individualism, leadership, politics, culture, religion, gender, race, and ethnic identities. Specific content may vary.
HIST 445. California History (3) [GE-AI]
California history from pre-colonial societies to present. Emphasis on early colonial societies, economy, environment, politics, race, gender, and California's place in popular culture.

## HIST 450. Senior Seminar in Historical Research (3)

Prerequisites: History 400 with a grade of C (2.0) or better and a minimum of 15 upper division units in history. Proof of completion of prerequisites required: Copy of transcript.

Capstone seminar on historical research. Application of historical theory and methods to original research in a selected field of history. Includes a major research paper based on primary sources.
HIST 451. Historians and the Public (3)
Prerequisites: History 400 with a Grade of C (2.0) or better and a minimum of 15 upper division units in history.

Analysis and practice of ways historians preserve, research, and interpret the past for public audiences. Topics include historic preservation projects, parks, museums, archives, and living history programs. Includes a major analytical essay or public history project.

## HIST 452. Advanced Internship in Applied History (3)

Prerequisites: History 400 with a Grade of C (2.0) or better and a minimum of 15 upper division units in history.

Campus and community archives, museums, government, and other historical agencies. Emphasis on critical analysis, writing, and historiography.

## HIST 455. Digital History (3) [GE]

Tools and practices used by historians to conduct research and present findings and results through a technology lens. Challenges, issues, theories, and uses of digital history.

HIST 473. Middle Eastern History from the Advent of Islam to 1500 (3) [GE]
Middle Eastern history, 600 C.E. to 1500 C.E.; spread of Islam through rise of Ottoman Empire.

## HIST 474. The Middle East Since 1500 (3) [GE]

Middle Eastern history since 1500 C.E.; Islamic empires, European colonialism, nationalism, and modernization.

## HIST 486. World War II (3)

Causes of World War II, its course, and its legacy for today's world.
HIST 488. Modern Jewish History (3) [GE]
Prerequisite: Upper division standing.
Social, religious, and intellectual life of European Jewry from Middle Ages to present; political struggle for emancipation; anti-Semitism, the Holocaust, and establishment of state of Israel.

## HIST 490. Senior Honors Thesis (3)

Prerequisites: History 400; open to history majors with senior standing and permission of the honors thesis adviser.

Directed research on a historical topic chosen in consultation with the honors thesis adviser, and completion of a senior honors thesis. Required of students wishing to graduate with a certificate of recognition in history.

## HIST 495. Internship in Applied History (3)

Prerequisites: Nine units in history. History 451 for some students (see instructor).

Supervised field placement of students in campus and community archives, historical museums, and other historical agencies. Practical experiences related to studies within history curriculum.

## HIST 496. Issues in History (1-4)

Examination of selected problems and current issues in history. May be repeated with change of content. Maximum credit six units with change of content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. See Class Schedule for specific content.

## HIST 499. Special Study (1-3)

Prerequisites: Consent of department chair and instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

## HIST 500. Topics in Ancient History (3)

Prerequisite: Upper division or graduate standing.
Variable topics in ancient history throughout the world may include: Women in Greek and Roman societies, magic in the Gre-co-Roman World, Silk Roads, and pre-contact Mesoamerica. See Class Schedule for specific topic. May be repeated with new content. Maximum credit six units.
HIST 501. History of Ancient Near Eastern Civilizations (3)
Major civilizations of Near East from the origin of civilization to Roman Conquest, including Egyptians, Babylonians, Hebrews, and Persians. Social, political, and religious problems.

## HIST 502. Ancient Greece (3)

Greek history from prehistoric period through Age of Alexander the Great. Emphasis on political, social, cultural and institutional developments, and historiography. Secondary attention to military, economic, and religious topics.

## HIST 503. Ancient Rome (3)

Roman history from origins of Rome to fall of the Empire. Emphasis on political, social, cultural and institutional developments, and historiography. Secondary attention to military, economic, and religious topics.

## HIST 504. The Dark Ages (3)

(Same course as Humanities 504)
Europe and the Mediterranean, sixth to eleventh centuries C.E. through various approaches: political, economic, social, and cultural. Topics include the barbarians and Vikings, the Byzantine, Arab, and Holy Roman Empires, the Norman Conquest, Charlemagne, Beowulf, feudalism, and serfdom.

## HIST 505. The Later Middle Ages (3)

Europe and the Mediterranean 1100-1450 C.E. through various approaches: political, economic, social, and cultural. Development of kingdoms of western Europe and relationship to Byzantine empire and other states.
HIST 506. The Renaissance (3)
(Same course as Humanities 506)
Intellectual, artistic, social, and economic transformation in Europe from fourteenth to seventeenth centuries.

## HIST 507. The Reformation (3)

(Same course as Religious Studies 507)
Continental Europe, 1500-1648. Split of Christendom; political and intellectual dissent; social fabric of family life; relationship between gender, class, and power; cultural stratification of European society.

## HIST 508. The Fall of the Roman Empire (3)

Prerequisite: Upper division or graduate standing.
History of Mediterranean region between third and sixth centuries C.E. Changes in society, politics, economics, the military, gender, sexuality, religion, literature, art, archaeology, and law. Competing perceptions of the period as one of "fall" versus one of "transformation."
HIST 509. British Century: Waterloo to World War I (3)
Prerequisite: Upper division or graduate standing.
History of England, 1815-1914, to include industrial supremacy; struggles over urban problems, reform, democratization, labor organization, national self-image; interplay of liberalism and collectivism; sources of social stability and instability; women's rights; jingoism; coming of World War I.

## HIST 512A. The Great War: A Turning Point in European

 History (3)Forces and events that shaped Europe in period prior to and during World War I, 1890-1919.
HIST 512B. The Age of Dictators and Contemporary Europe (3)
Europe in the age of dictatorship, world war, decline, and recovery.
HIST 514. History of Science: From Revolution to Evolution (3)
Prerequisite: Upper division or graduate standing.
Development of early modern European science. Origins of Western concept of "science," Greco-Roman and Arabic roots of science, impact of Renaissance humanism and voyages of exploration on Scientific Revolution, and imperial context of evolutionary theories and scientific racism.
HIST 516. Imperialism and the Colonial Experience (3)
Prerequisite: Upper division or graduate standing.
Imperialism and colonialism as these transformed both colonizing and colonized peoples, e.g., modernization, racism, Orientalism, multi-ethnic, Great Power competition, anti-colonial resistance, and nationalism.

## HIST 527. The Holocaust in Feature Films (3)

Two lectures and two hours of activity.
Prerequisite: Upper division or graduate standing.
Depiction of the Nazi policy of destroying European Jewry and its impact on the perpetrators, bystanders, victims, and the postwar world in feature films.

## HIST 532. Topics in Early American History (3)

Prerequisites: Upper division or graduate standing and three units in history at the college level.

Variable topics in history of colonial America and the early republic. Possible topics to include: women and the family; race, class and labor; American Revolution; religion and politics; immigrants' experiences. See Class Schedule for specific topic. May be repeated with new content. Maximum credit six units.

## HIST 533. Antebellum America (3)

Prerequisite: Upper division or graduate standing.
Westward expansion and movement, market revolution, democratic politics, revivalism, slavery, and women's rights.
HIST 534. Civil War and Reconstruction (3)
Prerequisite: Upper division or graduate standing.
Civil War and Reconstruction, emphasizing political affairs and role of Abraham Lincoln.

## HIST 535. The Age of Roosevelt (3)

The United States in Depression, War, and Cold War.
HIST 536. The United States Since World War II (3)
Major foreign and domestic issues confronting the United States, and the government policies and popular movements generated in response.
HIST 537. Star Trek, Culture, and History (3)
Prerequisite: Upper division or graduate standing.
Explores relationship between Star Trek's several television series, movies, novels, and the larger historical and cultural context of post-World War II America. Themes include race, gender, sexuality, foreign policy, terrorism, religion, and politics.

## HIST 539. Topics in the History of the American West (3)

Prerequisites: Upper division or graduate standing and three units of history at the college level.

Selected topics in history of American West such as Westward movement; Southwest borderlands; gender and the frontier; new western history. May be repeated with new content. Maximum credit six units.
HIST 540. Environmental History of the United States (3)
(Offered only at SDSU-IV)
The relationship of Americans to their environment from colonial times to the present with emphasis on how attitudes and values have affected personal behavior and public policy toward the land.
HIST 544A. Early American Foreign Relations (3)
Development of American foreign relations from Colonial Period to the Spanish-American-Filipino War.
HIST 544B. Modern American Foreign Relations (3)
Development of American foreign relations since 1900.
HIST 548. Race and Ethnicity in United States History (3)
(Same course as Chicana and Chicano Studies 548)
Prerequisite: Upper division or graduate standing.
Race and ethnicity in America from colonial period through twentieth century to include historical construction of identity; colonization, slavery, state formation; labor, immigration, politics of whiteness; applicability of black/white binary of a multiethnic society.

## HIST 550. Colonial Mexico (3)

Social history of Mexico from pre-contact through early national period using primary and secondary sources. Processes of social and cultural negotiation involving gender, religion, environment, medicine, and urban experience.
HIST 551. Modern Mexico (3)
Social history of Mexico since early national period using primary and secondary sources. Processes of social and cultural negotiation involving gender, religion, environment, medicine, and urban experience.
HIST 553. History of Slavery in the Americas (3)
(Same course as Latin American Studies 553)
Prerequisite: Upper division or graduate standing.
Trans-Atlantic slavery from the fifteenth to nineteenth centuries. Liberation movements, nation-states, revolution, slavery, and capitalism. Agency of enslaved people, agricultural and environmental transformations, legacies of trans-Atlantic slavery and contemporary enslavement, new communities and diversities, race and racism.
HIST 556. History of Brazil (3)
(Same course as Latin American Studies 556)
Prerequisite: Upper division or graduate standing.
Economic, political, and social history of Brazil from precolonial era to present. Democratic and dictatorial rule, industrialization, populism, race and racism, and slavery.
HIST 557. Dictatorships and Human Rights in Latin America (3)
Prerequisite: Upper division or graduate standing.
Cold War tensions; United States-Latin American relations;
Cuban Revolution; rise of dictatorial rule in Argentina, Brazil, Chile,
Guatemala; transition to democracy since the 1980s.
HIST 558. Latin America in World Affairs (3)
History of Latin America's political and economic relations with Europe, the Soviet Union, the United States, and the Third World.

## HIST 566. Ancient and Imperial China (3)

Prerequisite: Upper division or graduate standing.
Chinese history before 1600 CE. Confucianism, Daoism, Legalism; emperors and evolution of Chinese state; gender and sexuality; Buddhism and daily life along Silk Route; Song technological and commercial revolution; Mongol invasions; Ming voyages; China's role in pre-modern world history.

## HIST 567. China in Revolution (3)

China's history during the tumultuous nineteenth and twentieth centuries. China's forced encounter with Western imperialism, rural, and urban social movements. Impact of Mao's Revolution on everyday life in China, successes, limitations of China's recent reform policies.
HIST 570. Modern Japan: From Samurai to Sony (3)
Prerequisite: Upper division or graduate standing.
Japanese history from 1600 to present. Late-samurai period; nineteenth century industrialization and imperialism; Japan in World War II: Nanjing, Pearl Harbor, Hiroshima; foundations of postwar "economic miracle"; gender relations, anime, and identity in contemporary Japan; Japan's role in twenty-first century world.
HIST 574. Arab-Israeli Relations, Past and Present (3)
Arab-Israeli conflict and diplomacy over Palestine from perspectives of Zionism, Arab nationalism, and Great Power relations from nineteenth century to present.

## HIST 580. Topics in the History of War and Violence (3)

Prerequisite: Upper division or graduate standing.
History of war and violence may include: Violence in Africa, modern genocide, trauma and modern East Asia, social suffering in historical perspective. See Class Schedule for specific topic. May be repeated with new content. Maximum credit six units.

## HIST 581. Topics in Urban History (3)

Prerequisite: Upper division or graduate standing.
Variable topics in urban history may include: The city in United States history, Chinatowns, suburbs and suburbanization, urban politics. See Class Schedule for specific topic. May be repeated with new content. Maximum credit six units.
HIST 582. Topics in Social and Cultural History (3)
Prerequisite: Upper division or graduate standing.
Variable topics in social and cultural history may include: Ritual in early modern Europe, radicals ad revolutionaries, intellectuals and society, families in former times, and American popular culture. See Class Schedule for specific topic. May be repeated with new content. Maximum credit six units.

## HIST 583. Topics in History of Gender and Sexuality (3)

Prerequisite: Upper division or graduate standing.
Variable topics in history of gender and sexuality may include: Gay and Lesbian history, Asian American gender and sexuality, genders in Latin America. See Class Schedule for specific topic. May be repeated with new content. Maximum credit six units.
HIST 584. Topics in Environmental History (3)
Prerequisite: Upper division or graduate standing.
Variable topics in environmental history may include: Press, politics, environment, world environmental history, water and society. See Class Schedule for specific topic. May be repeated with new content. Maximum credit six units.
HIST 585. History of the Sixties (3)
Prerequisite: Upper division or graduate standing.
Variable topics in the history of the 1960s may include: America in the 1960s, Africa in the 1960s, politics and protests in 1960s, Europe in the 1960s. See Class Schedule for specific topic. May be repeated with new content. Maximum credit six units.

## HIST 586. Topics in World History (3)

Prerequisite: Upper division or graduate standing.
Major historical problems, themes, or topics from global, chronological, and geographical perspectives of world history to include frontiers, food and famine, violence and warfare, science, religion and magic, the Atlantic world, medieval era. See Class Schedule for specific topic. May be repeated with new content. Maximum credit six units.

## HIST 596. Selected Studies in History (1-4)

Topics in various fields of history, such as biography, war, science, technology, urbanization, minority groups, immigration, and capitalism. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

# Weber Honors College 

In the Division of Academic Engagement and Student Achievement

OFFICE: Administration 201
TELEPHONE: 619-594-2872
E-MAIL: honors@sdsu.edu
WEBSITE: http://www.sdsu.edu/honors
Director: Stacey L. Sinclair, Ph.D.

## General Information

The Weber Honors College provides a broad academic foundation for SDSU's most academically engaged undergraduate students. Honors students are exposed to subjects in the humanities, social sciences, and natural sciences. The objective of the Weber Honors College is to provide the richest possible intellectual experience by helping students become conversant in multiple disciplines, think flexibly, solve problems and pursue the creative expression of ideas. Building upon the university's commitment to educate students for a global world, the Weber Honors College provides a distinctive learning community for students who seek creative, innovative and responsible ways to understand and engage the international community.

The Weber Honors College features a unique interdisciplinary curriculum made up of small seminars that prepare students for high-impact educational experiences beyond the classroom, including study abroad, research, leadership, service, and creative activity; and for future graduate work and successful careers regardless of their chosen field of study. Students enrolled in the Weber Honors College are eligible for a variety of scholarships awarded through the college.

San Diego State University rewards completion of the Weber Honors College requirements with special recognition at commencement, a distinct transcript annotation, a Weber Honors College graduation banquet and a Weber Honors College certificate as a supplement to the diploma. The Weber Honors College also provides a special honors medallion to its graduates, especially suited for wearing at commencement.

## Admission to the Weber Honors College

The priority consideration application deadline for students is January 15. After January 15, applications will be accepted and evaluated on a space-available basis until March 30. For entering first year students, eligibility for acceptance into the Weber Honors College is determined by several factors, including SAT score (a combined evidence-based reading and writing subscore and mathematics subscore of 1270 or above) or ACT score (a composite score of 28 or above), or high school GPA (3.7 or above), and thoughtful completion of the application essay. For continuing and transfer students, eligibility is determined according to collegiate GPA (3.2 or above) and quality of the application essay. Once admitted to the Weber Honors College, students must maintain at least a 3.2 cumulative GPA and earn a grade of B (3.0) or better in all honors courses. For additional information and to download the application, interested students should consult the website at http://www.sdsu.edu/honors.

## Key Features of the Curriculum

Study Abroad. All Weber Honors College students are required to complete a credit-bearing study abroad experience prior to their final semester at SDSU. The Weber Honors College recognizes that students may have limited time and/or resources to engage in study abroad. To accommodate students' needs, a combination of short-term and long-term options is available to students. To meet the study abroad requirement, students may choose either short-term study tours, summer abroad programs, semester-long, or year-long exchanges. See the Honors Adviser to make arrangements to meet this requirement.

Honors Senior Capstone. The Weber Honors College is committed to helping students understand what, how, when, and why they learn. All Weber Honors College students are required to integrate their academic, professional, and community involvement, including major and honors-specific coursework and high impact educational experiences beyond the classroom, and formulate an action plan for post-baccalaureate personal and professional aspirations in a culminating capstone.

## Honors Minor in Interdisciplinary Studies <br> (Minor Code: 49993) (SIMS Code: 888001)

The Honors Minor in Interdisciplinary Studies consists of 16 units of honors interdisciplinary seminars and honors sections of general education courses, of which four units are lower division and 12 units are upper division. A maximum of three units of honors sections of general education courses may be counted to satisfy the requirements of the minor. Students must complete a study abroad experience. Students must be admitted to the Weber Honors College at the time they declare the minor.

Preparation for the Honors Minor (4 units). Honors College 100 and 113.

Upper Division for the Honors Minor (12 units). Honors College 313 ( 6 units), 495, and three units selected from Honors College 413 or honors sections of general education courses (Anthropology 402; Humanities 370, 405 [or Religious Studies 405], 409; Sociology 320).

Courses in the major department or required for the major may not be used to satisfy requirements for the minor. A minimum of six upper division units must be completed in residence at San Diego State University.

Study Abroad Requirement. All honors minor students are required to complete a credit-bearing study abroad experience prior to their final semester at SDSU.

To meet the study abroad requirement, students must complete one of the following:

1. An approved SDSU international program, either listed in the SDSU Aztecs Abroad database or approved by SDSU through pre-departure permission from the honors adviser; or;
2. One course selected from:

- Asian Studies 490;
- Education 450;
- General Studies 450;
- Health and Human Services 290 or 350;
- International Security and Conflict Resolution 450;
- Latin American Studies 320, 350, 450, or 550;
- Political Science 450;
- Public Health 550;
- Science 350.


## Courses (HONOR)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

HONOR 100. Introduction to Honors (1)
Ways to integrate learning and experiences to enrich college experience. Leadership, community service, research and creative arts, scholarship and fellowships, and study abroad opportunities.

## HONOR 113. Seminar in Honors Connection and

Commitment (3)
Prerequisite: Admission to the Weber Honors College.
Interdisciplinary education and the theoretical and practical integration of knowledge. Coursework beyond the classroom in areas of community service, creative activity, leadership, research, and study abroad. See Class Schedule for specific content.

## HONOR 296. Honors Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## HONOR 299. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. A maximum combined credit of nine units of 299, 499 courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
HONOR 313. Seminar in Interdisciplinary Studies (3)
Prerequisite: Credit or concurrent registration in Honors College 113.

Idea, philosophy, and method of interdisciplinary studies. Various disciplines and topics from interdisciplinary perspectives, workplaces, and societal settings. Integration of a variety of schools of thought and the value of an interdisciplinary outlook. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

## HONOR 413. Interdisciplinary Perspectives on

Social Problems (3) [GE]
Various social problems from interdisciplinary perspectives. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units of which three units may be applicable to General Education.

## HONOR 495. Seminar in Integrative Capstone (3)

Prerequisite: Admission to the Weber Honors College.
Honors culminating capstone experience. Synthesis and integration of academic, professional, and community involvement, including major and honors-specific coursework and high impact practices. Formulation of action plan for post-baccalaureate personal and professional aspirations. (Formerly numbered Honors Program 490C.)
HONOR 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## HONOR 499. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. A maximum combined credit of nine units of 299, 499 courses applicable to a bachelor's degree. Maximum credit of six units of 499 applicable to a bachelor's degree.

# Hospitality and Tourism Management 

In the L. Robert Payne School of Hospitality and Tourism Management<br>In the College of Professional Studies and Fine Arts

## OFFICE: Professional Studies and Fine Arts 436B* <br> TELEPHONE: 619-594-5110 / FAX: 619-594-4443 <br> WEBSITE: http://www.sdsu.edu/htm

*PSFA office locations are subject to change due to construction. Check the website at http://psfa.sdsu.edu for current office locations.

## Faculty

Emeritus: Gattas
Director: Winston
Sycuan Institute on Tribal Gaming Chair: Spilde
Professors: Spilde, Testa
Associate Professor: Sipe
Assistant Professors: Cynn-Ponting, Dillette
Lecturers: Blake, Campbell, Corr, Cowden, De Beers, Defino, Galloway, Greenberg, Khaleghi, Martin
Director of The J. Willard and Alice S. Marriott Foundation Student Center for Professional Development: Christina Jeffries

## Offered by the L. Robert Payne School of Hospitality and

 Tourism ManagementMaster of Science degree in hospitality and tourism management. Master of Science degree in meeting and event management.
Major in hospitality and tourism management with the
B.S. degree in applied arts and sciences.

Emphasis in hotel operations and management.
Emphasis in meetings and events operations and management. Emphasis in restaurant operations and management.
Emphasis in tribal gaming operations and management.
Certificate in meeting and event management
(refer to the Graduate Bulletin).

## The Major

Hospitality and tourism management is an interdisciplinary major which culminates in a Bachelor of Science degree offered by the College of Professional Studies and Fine Arts. This program provides students with a solid undergraduate program emphasizing basic business management principles and their specific application to the hospitality and tourism industry and its components that make up the industry. The program integrates a significant number of courses from diverse disciplines into a comprehensive theoretical and applied program necessary for success in the hospitality and tourism professions. The program is directed at management positions in the industry, positions that require a broad understanding of management and its application to the businesses and organizations that flourish in this sector of the international, national, state, and local economies.

Students select one of the following emphasis areas for in-depth study: Hotel Operations and Management; Meetings and Events Operations and Management; Restaurant Operations and Management; or Tribal Gaming Operations and Management. With a solid core of business management courses and theoretical and applied study of the broad hospitality and tourism industry, students are educated to move readily into management positions in one of the state's, nation's, and world's fastest growing economic sectors. The hotel and restaurant emphases will prepare managers to effectively administer businesses that provide lodging and food services to business and leisure travelers and tourists. The emphasis in meetings and events operations and management is aimed at preparing individuals to successfully manage destination based agencies that attract and entertain guests in a host region (convention centers, bureaus, festivals, sporting events, etc.). The
tribal gaming emphasis prepares students to maximize the economic and social outcomes of tribal gaming facilities, which operate in a unique tribal government-owned business environment.

## Advising

All students admitted to the university with a declared major in hospitality and tourism management must attend an advising meeting with the undergraduate advisers in the school every semester.

## Impacted Program

The hospitality and tourism management (HTM) major is an impacted program. To be admitted to an HTM major emphasis, students must meet the following criteria:
a. Complete with a grade of $\mathrm{C}(2.0)$ or better: Hospitality and Tourism Management 201, 219, 223, 250; Accountancy 201; Economics 101 and 102; Recreation and Tourism Management 290; Rhetoric and Writing Studies 290, and either Statistics 119 or Economics 201. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Complete a minimum of 60 transferable semester units;
c. Have a cumulative GPA of 3.0;
d. Students who meet all requirements except the GPA may request to be placed on the waiting list. Students on the waiting list will be admitted on a case-by-case basis formulated around the program's exception policy. Contact the School of Hospitality and Tourism Management (PSFA436B), 619-594-4964, for more information.
To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Internships

A significant portion of the student's educational program is dedicated to community-based learning components termed internships. Prior to the first internship, students must complete 400 hours of work experience (see school adviser for details). Each student must complete two, 300+ hour internships in hospitality and tourism businesses. These experiential learning components enable students to apply their classroom education to real world experiences in actual businesses. The HTM program has purposely entered into partnerships with San Diego's finest hospitality and tourism enterprises to provide students with specialized facilities and experiences that complete a well-rounded and comprehensive educational experience for graduation and entry into this rewarding profession.

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Hospitality and Tourism Management Major

With the B.S. Degree in Applied Arts and Sciences

## (Major Code: 05081)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A major in hospitality and tourism management must be planned with an emphasis in hotel operations and management,
or meetings and events operations and management, or restaurant operations and management, or tribal gaming operations and management.

A minor is not required with this major. Preparation for the major courses may not be taken $\mathrm{Cr} / \mathrm{NC}$; the minimum grade in each class must be a C (2.0) or better.

## Emphasis in Hotel Operations and Management

## (SIMS Code: 663102)

Preparation for the Major. Hospitality and Tourism Management 201, 219, 223, 250; Accountancy 201; Economics 101, 102; Recreation and Tourism Management 290; Rhetoric and Writing Studies 290, and Statistics 119 or Economics 201. (30 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$. The minimum grade in each class is $C$ (2.0) or better.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Recreation and Tourism Management 396W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. All students in the Hotel Operations and Management Emphasis are required to complete an international experience requirement. To meet this requirement, students must complete one of the following with the approval and written consent of the undergraduate adviser. Scholarships are available. The international experience should meet the student learning outcomes of the emphasis.

1. International field trip;
2. International internship;
3. International student exchange;
4. CSU Study Abroad Program;
5. International professional engagement.

Major. A minimum of 46 upper division units to include Hospitality and Tourism Management 301, 320, 380, 398, 455, 480, 490, 491, 498; and two units of electives selected from Hospitality and Tourism Management 333, 430, 431, 433, 435, or Theatre 476; Business Administration 323, 350, 360, 370; Management 352; Recreation and Tourism Management 404, 470.

## Emphasis in Meetings and Events Operations and Management

## (SIMS Code: 663105)

Preparation for the Major. Hospitality and Tourism Management 201, 219, 223, 250; Accountancy 201; Economics 101, 102; Recreation and Tourism Management 290; Rhetoric and Writing Studies 290, and Statistics 119 or Economics 201. (30 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$. The minimum grade in each class is $C(2.0)$ or better.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Recreation and Tourism Management 396W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. All students in the Meetings and Events Emphasis are required to complete an international experience requirement. To meet this requirement, students must complete one of the following with the approval and written consent of the undergraduate adviser. Scholarships are available. The international experience should meet the student learning outcomes of the emphasis.

1. International field trip;
2. International internship;
3. International student exchange;
4. CSU Study Abroad Program;
5. International professional engagement.

Major. A minimum of 46 upper division units to include Hospitality and Tourism Management 301, 330, 380, 398, 432, 480, 490, 491, 498; and two units of electives selected from Hospitality
and Tourism Management 333, 430, 431, 433, 435; Business Administration 323, 350, 360, 370; Management 352; Recreation and Tourism Management 404, 470.

## Emphasis in Restaurant Operations and Management <br> (SIMS Code: 663103)

Preparation for the Major. Hospitality and Tourism Management 201, 219, 223, 250; Accountancy 201; Economics 101, 102; Recreation and Tourism Management 290; Rhetoric and Writing Studies 290, and Statistics 119 or Economics 201. (30 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$. The minimum grade in each class is $C$ (2.0) or better.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Recreation and Tourism Management 396W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.
Major. A minimum of 47 upper division units to include Hospitality and Tourism Management 301, 340, 380, 398, 455, 480, 490, 491, 498; and three units of electives selected from Hospitality and Tourism Management 342, 465; Business Administration 323, 350, 360, 370; Management 352; Recreation and Tourism Management 404, 470.

## Emphasis in Tribal Gaming Operations and Management

(SIMS Code: 663106)
Preparation for the Major. Hospitality and Tourism Management 201, 219, 223, 250; Accountancy 201; Economics 101, 102; Recreation and Tourism Management 290; Rhetoric and Writing Studies 290, and Statistics 119 or Economics 201. (30 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$. The minimum grade in each class is $C(2.0)$ or better.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Recreation and Tourism Management 396W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 45 upper division units to include Hospitality and Tourism Management 301, 370 [or American Indian Studies 370], 371, 372, 373, 380, 398, 480, 490, 498; Business Administration 323, 350, 360, 370; Management 352; Recreation and Tourism Management 404, 470.

## Courses (HTM)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

HTM 201. Introduction to Hospitality and Tourism Management (3)
Hospitality and tourism industry with focus on basic management theories and principles as they apply to hospitality and tourism; basic structure, organization, and management of industry components and the services/products they deliver.
HTM 219. Hospitality, Recreation, and Tourism Professions (3)
Prerequisite: Hospitality and Tourism Management 201 or Recreation and Tourism Management 101.

Investigation of professional identities through review of literature, collection of data, analysis, and synthesis of findings/results.
HTM 223. Hospitality Managerial Accounting and Controls (3)
Prerequisites: Hospitality and Tourism Management 201 or Recreation and Tourism Management 101 and Accountancy 201.

Utilization of accounting information in decision-making, planning, directing, and controlling in hospitality and tourism management. Integrates areas of managerial accounting and controls with applications in hospitality industry. Not open to students with credit in Accountancy 202.

## HTM 250. Hospitality Law (3)

Prerequisite: Hospitality and Tourism Management 201.
Hospitality law, legal, and policy areas arranged according to specific entities hospitality managers have primary relationships: guests, employees, third parties, and government.

## HTM 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
HTM 301. Service Leadership Development (2)
One lecture and two hours of activity.
Prerequisites: Hospitality and Tourism Management 201 and upper division major in hospitality and tourism management.

Service leadership theory and development in hospitality and tourism industry. Application of business models and industry metrics with focus on individual assessment and development of leadership competencies.

## HTM 320. Hotel Management (3)

Two lectures and two hours of activity.
Prerequisite: Upper division major in hospitality and tourism management.

Hotel management and operations to include room reservations, housekeeping, front desk management, concierge, sanitation, safety, security, and bellstand. Revenue management, forecasting, measuring performance, transient versus group displacement, service quality, pricing and inventory management, ethics.

## HTM 330. Event and Meeting Industry (3)

Prerequisites: Upper division standing in hospitality and tourism management or another major approved by the school and consent of instructor.

History and motivation behind meetings, elements of events, event operations and project management, types of meetings and events and industry and economic models.
HTM 333. Weddings and Social Events (1)
Prerequisite: Hospitality and Tourism Management 330.
Cultural, social, economic, and other factors affecting planning and execution of weddings and other social events.

## HTM 340. Restaurant Management (3)

Two lectures and three hours of laboratory.
Prerequisite: Hospitality and Tourism Management 301
Restaurant and food service principles to operations of casual and fine dining restaurants with emphasis on cost/volume/profit relationships, forecasting demand and market share, market niche/ positioning, sanitation and safety, scheduling, quality management, customer service, technology, and ambience/environment.
HTM 342. Restaurant Marketing and Menu Management (3)
Prerequisites: Hospitality and Tourism Management 340 and Business Administration 370.

Restaurant marketing and menu design, menu research and development, and other marketing-related management functions.
HTM 370. Tribal Gaming: Cultural and Political Context (3) [ES]
(Same course as American Indian Studies 370)
Prerequisite: Upper division standing.
Social and political context of American Indian tribal gaming, political relationships between federal and tribal governments, contemporary examples of tribal gaming, sociocultural and economic forces leading to gaming as strategy for economic development, and responses by non-Indian communities to tribal gaming.
HTM 371. Tribal Gaming: Casino Operations (3)
Prerequisite: Upper division standing.
Functional units of a casino and how they work together to create a viable business model. Economic and management issues in gaming industry, with emphasis on tribal applications.

HTM 372. Tribal Gaming: Legal and Regulatory Issues (1)
Prerequisite: Upper division standing.
Legal and regulatory structure of tribal gaming including Federal Indian Gaming Regulatory Act and California compacting process.
HTM 373. Tribal Gaming: Marketing and Public Relations (2)
Prerequisite: Upper division standing.
Key strategies, tactics, and techniques used by marketing and public relations professionals to fuel demand for tribal casino gaming. Customer relationship marketing (CRM), radio/TV/ print advertising, promotions, and guest incentives.
HTM 380. Hospitality Leadership Theory (1)
Prerequisite: Upper division major in hospitality and tourism management.

Key components of leadership behavior and practice.
HTM 398. Internship I in Hospitality and Tourism (3) $\mathrm{Cr} / \mathrm{NC}$
Prerequisite: Hospitality and Tourism Management 301 and consent of internship coordinator. A minimum of 400 hours of prior documented hospitality work experience.

Entry level experience in a hotel, restaurant, or related position at a university approved site. Minimum 300 hours of quality work at site required during semester and completion of project. NOTE: Only students who have been approved for placement by internship coordinator may enroll in this course.
HTM 430. Specialty Event Management (2)
One lecture and two hours of activity.
Prerequisite: Hospitality and Tourism Management 330.
Special events planning and execution.
HTM 431. Convention Services for Hotels (2)
Prerequisites: Hospitality and Tourism Management 301 and 330.
Planning, developing, and implementing hotel meeting and convention services.

## HTM 432. Project Management for Events (3)

Two lectures and two hours of activity.
Prerequisite: Hospitality and Tourism Management 330.
Defining and evaluating success and engagement, financial planning, project management, registration and ticketing, return on investment, site selection and physical design, and time tracking.
HTM 433. Destination Management Services (2)
Prerequisite: Hospitality and Tourism Management 431.
Destination management companies including incentive travel and marketing techniques, structure, governance, business, and services operations.
HTM 435. Sporting Events and Festival Management (3)
Prerequisite: Hospitality and Tourism Management 431.
Organization and administration of attraction-based events focusing on scheduling, financing, budgeting and revenue distribution, logistics, planning techniques, marketing, contracts, and staging considerations.
HTM 453. Hospitality Sales and Marketing (2)
Prerequisites: Hospitality and Tourism Management 201, 320; Business Administration 370.

Sales functions and management skills required of hospitality companies. Tactics and techniques used to reach target audiences.
HTM 455. Hospitality Financial Management (3)
Prerequisite: Business Administration 323.
Managerial insights and techniques for understanding, evaluating, and managing hospitality industry financial information and making sound decisions.

## HTM 456. Hotel Revenue Management (2)

Prerequisite: Hospitality and Tourism Management 320.
Revenue management in hotel industry including marketplace intelligence, forecasting, pricing, and revenue optimization techniques.

## HTM 465. Hospitality Technology (1)

Prerequisite: Hospitality and Tourism Management 490.
Operative characteristics of extant hospitality industry technology; techniques for evaluating investments in new technology solutions.

HTM 480. Leadership and Coaching in Hospitality (3)
Prerequisites: Hospitality and Tourism Management 301 and 380.

Development of interpersonal communication, coaching, and training skills to maximize employee performance in a service setting.
HTM 490. Strategic Management in Hospitality and Tourism (3)
Prerequisites: Hospitality and Tourism Management 398, 480, and Business Administration 370.

Problems and issues of strategic planning in hospitality and tourism businesses including methods, techniques, and models used to identify strategic issues and generate future-oriented action plans to implement change.
HTM 491. Leadership and Self Development in Hospitality (2)
Prerequisites: Hospitality and Tourism Management 301, 480, and upper division standing in hospitality and tourism management.

Capstone leadership course. Advanced leadership topics and completion of student leadership portfolios.
HTM 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.
HTM 498. Internship II in Hospitality and Tourism (3) $\mathrm{Cr} / \mathrm{NC}$
Prerequisites: Hospitality and Tourism Management 398 and Business Administration 350, Management 352. Food handler certification required for restaurant majors.

Experience in a hotel, restaurant, tribal casino, or tourism site in student's chosen emphasis at a university approved site. Minimum of 300 hours of quality work at site required during semester in addition to completion of site project.

## HTM 499. Special Study (1-3)

Prerequisite: Consent of special study adviser.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSE

(Also Acceptable for Advanced Degrees)
HTM 596. Selected Topics in Hospitality and Tourism
Management (1-3)
Prerequisite: Upper division or graduate standing.
Selected topics in hospitality, tourism, and/or tribal gaming management. May be repeated with new content and approval of instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

# Humanities 

## In the College of Arts and Letters

OFFICE: Arts and Letters 662
TELEPHONE: 619-594-5186 / FAX: 619-594-1004
WEBSITE: http://classicsandhumanities.sdsu.edu
Faculty
Emeritus: Eisner, Genovese, Skwara
Chair: Levitt
Associate Professors: Dumas, Smith
Lecturers: Caldwell, Kuhlken
Offered by the Department of Classics and Humanities
Major in humanities with the B.A. degree
in liberal arts and sciences.
Emphasis in European humanities.
Minor in humanities.

## The Major

Humanities takes an interdisciplinary approach to the study of culture with attention to history, language, literature, media, philosophy, visual arts, and economic, political, social, and spiritual institutions. Humanities does not seek to establish objective truths but rather to think about the diversity of aesthetic trends, historical narratives, ideological systems, and lived experiences that comprise societies past and present, local and global. It does so through engagement not only with dominant cultural narratives, expressions, and institutions, but also with the perspectives of non-dominant individuals, communities, and cultures.

Through humanistic inquiry, we gain insights into other cultural heritages and develop skills that are vital in the global society we inhabit: the abilities to engage critically and effectively with perspectives other than our own, communicate and collaborate across cultural boundaries, and address complex problems with attention to how they affect diverse populations.

Humanities graduates are prepared to enter into a broad range of professions or may go on to pursue a graduate degree in a specific humanities discipline or in business, law, or medicine.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Impacted Program

The humanities major and emphasis are impacted programs. To be admitted to the humanities major or emphasis, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Humanities Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 15991)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

During their last semester, all seniors majoring in humanities shall submit to the department a portfolio of their scholarly work that includes a 300-word summary of their study of the humanities, the paper submitted for Humanities 490, and seminar presentation.

A minor is not required with this major.

## Global Humanities Program

(SIMS Code: 113501)
Preparation for the Major. Humanities 101 or 102; nine units from Humanities 130 [or Jewish Studies 130], 140, 201, Classics 140, Comparative Literature 270A, 270B, History 100, 101, 105, 106, Religious Studies 101, Women's Studies 101, 102. (12 units)

Language Requirement. Majors in global humanities program require completion of additional courses beyond the third college semester or fifth quarter taught in a language other than English. Refer to selections below. (16-25 units)
Arabic 101, 102, 201, 202; and one four-unit upper division course taught in the language. ( 20 units)
Chinese 101, 102, 201, 202; and one three-unit upper division course taught in the language. ( 23 units)
French 100A, 100B, 201, 210, 221; and one three-unit upper division course taught in the language. (23 units)
German 100A, 100B, 202, 205A, 205B; and one three-unit upper division course taught in the language. (24 units)
Greek Classics 101G, 202G, 303G, 304G. (16 units)
Italian 100A, 100B, 201, 211, 212; and one three-unit upper division course taught in the language. (24 units)
Japanese 111, 112, 211, 212; and one three-unit upper division course taught in the language. ( 23 units)
Korean 101, 102, 201, 202; and one three-unit upper division course taught in the language. ( 23 units)
Latin Classics 101L-202L and Classics 303L-304L. (16 units)
Persian 101, 102, 201, 202; and one four-unit upper division course taught in the language. (20 units)
Portuguese 101, 102, 203, 204, and 311 or 312. (19 units)
Russian 100A, 100B, 200A, 200B; and one three-unit upper division course taught in the language. (23 units)
Spanish 101, 102, 201, 202, 211, 212; and Spanish 301 or 302. (25 units)
See foreign language departments for equivalents. This fulfills language degree requirement for the B.A. degree in Liberal Arts and Sciences.

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above before taking Humanities 390W and earn a grade of $C$ (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. The department encourages international experience for students in the global humanities program. It will facilitate the transfer of humanities credits for appropriate study abroad, student exchange, or other overseas programs. International internships may also receive humanities credit if approved in advance by a department adviser.

Major. A minimum of 30 upper division units to include Humanities 390W, 490; nine units selected from the following courses in American/European humanities: Humanities 322 [or Lesbian, Gay, Bisexual, and Transgender Studies 322], 370, 405 [or Religious Studies 405], 406, 407, 408, 580, Classics 350; nine units selected from the following courses in global humanities: Humanities 380 [or Japanese 380], 409, 410, 411 [or Religious Studies 411], 412, 580. Six additional upper-division units in global content from
any program/department. These courses may focus on a single geographical region beyond North America and Europe (e.g., Asia, Africa, Latin America) or cover a topic in a "global" or "international" context (in consultation with the humanities undergraduate adviser).

Elective Approval. Elective courses taken to fulfill the major must be approved by the humanities undergraduate adviser.

## Emphasis in European Humanities

(SIMS Code: 113505)
Preparation for the Major. Humanities 101 or 102; History 105106; and three units from Comparative Literature 270A, 270B, Humanities 140, Religious Studies 101, or Women’s Studies 102. (12 units)

Language Requirement. Majors in emphasis in European humanities require completion of additional courses beyond the third college semester or fifth quarter taught in a language other than English. Refer to selections below. (16-25 units)
French 100A, 100B, 201, 210, 221; and one three-unit upper division course taught in the language. ( 23 units)
German 100A, 100B, 202, 205A, 205B; and one three-unit upper division course taught in the language. (24 units)
Greek Classics 101G, 202G, 303G, 304G. (16 units)
Italian 100A, 100B, 201, 211, 212; and one three-unit upper division course taught in the language. (24 units)
Latin Classics 101L-202L and Classics 303L-304L. (16 units)
Portuguese 101, 102, 203, 204, and 311 or 312. (19 units)
Russian 100A, 100B, 200A, 200B; and one three-unit upper division course taught in the language. (23 units)
Spanish 101, 102, 201, 202, 211, 212; and Spanish 301 or 302. (25 units)
See foreign language departments for equivalents. This fulfills language degree requirement for the B.A. degree in Liberal Arts and Sciences.

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above before taking Humanities 390W and earn a grade of $C$ (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. The department encourages international experience for students in the emphasis in European humanities. It will facilitate the transfer of humanities credits for appropriate study abroad, student exchange, or other overseas programs. International internships may also receive humanities credit if approved in advance by a department adviser.

Major. A minimum of 36 upper division units to include Classics 340, Humanities 390W, 405 [or Religious Studies 405], 406, 407, 408, 409, 410, 490; three units from Geography 336, Political Science 301A, 301B, 302; six units from Art (art history), Comparative Literature, English, History, Humanities, Music, Philosophy, Religious Studies, Theatre, or Women's Studies.

Elective Approval. Elective courses taken to fulfill the major must be approved by the humanities undergraduate adviser.

## Humanities Minor

(SIMS Code: 113501)
The minor in humanities consists of a minimum of 18 units, of which at least 12 units must be upper division and at least 12 units must be in Humanities; three units must be selected from Asian Studies 458 [or Religious Studies 458]; three units may be selected from Classics 140 or Comparative Literature 270A.

International Experience. The department encourages international experience for students in the humanities minor. It will facilitate the transfer of humanities credits for appropriate study abroad, student exchange, or other overseas programs. International internships may also receive humanities credit if approved in advance by a department adviser.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Courses (HUM)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

HUM 101. Introduction to Humanities (3) [GE]
Preliminary investigation: how values and ideals are expressed in literary, artistic, and intellectual achievements of individuals and civilizations throughout the world.

## HUM 102. Global Humanities (3) [GE]

Themes from standpoint of global interconnections. Interdisciplinary examinations through historical, linguistic, literary, and philosophical lenses. Current issues of global importance.

## HUM 130. The Jewish Heritage (3) [GE]

(Same course as Jewish Studies 130)
Hebraic and Jewish influences on the arts, literature, philosophy, and religion of Western civilization.

## HUM 140. World Mythology (3) [GE]

Comparative themes and figures from various mythologies of the world. Interpretation of myths; their influence on art, culture, and history.
HUM 201. The Body: Identity, Crisis, Resistance (3) [GE]
How bodies shape our understanding of ourselves and others across multiple spheres of private and public life. The body and identity, physiological health challenges and solutions, the social power of physical movement.
HUM 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)

## HUM 310. French Culture (3) [GE]

Literature and culture stemming from France. Literary, artistic, and intellectual achievements. Traditions and influences to include contributions of the Francophone world.

## HUM 322. LGBT History and Culture (3) [GE]

(Same course as Lesbian, Gay, Bisexual, and
Transgender Studies 322)
Interdisciplinary field of lesbian and gay studies with attention to history and artistic expression. Topics include varying attitudes toward homosexuality in history, as well as literary, artistic, theatrical, and musical contributions of the lesbian, gay, bisexual, and transgender community.

## HUM 330. Russian Culture (3) [GE]

Religion, literature, philosophy, music, and art of Russia. From the patriarchs of the past to the people of the present. Russia's influence on European humanities and world culture.
HUM 360. Animal Humanities (3) [GE]
Humanities beyond "the human." Nonhuman animals as subjects in the world. Animals as focus of ethics, literature, philosophy, theory, and visual culture.

## HUM 370. American Culture (3) [GE]

Literary, artistic, and intellectual achievements of the United States from colonial times to the present day. Great cultural traditions and influences represented in the contributions of Americans of diverse gender, ethnic, geographic, and political identity.

## HUM 380. Japanese Culture (3) [GE]

(Same course as Japanese 380)
Significant works of literary, performing, and visual arts to include array of artistic trends, cultural phenomena, historical developments, and socio-political discourses throughout the nation's long and tumultuous history. Taught in English.

## HUM 390W. Writing in the Humanities (3)

Prerequisites: Humanities 101 or 102 with a grade of $C$ (2.0) or better. Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or better (or earned a grade of C (2.0) or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Theoretical approaches in study of humanities. Writing in discipline of humanities through analysis of key thinkers in history.
HUM 405. Faith and Hope (3) [GE]
(Same course as Religious Studies 405)
Humanities as expressed in religion. Acquisition and/or loss of faith. Questioning of theological systems. Confrontation with death. Nature of hope. Use of signs, symbols, and narratives to generate social structures. Symbolic and mystical systems of meaning. Influence of religion upon culture.

## HUM 406. Renaissance and Self (3) [GE]

Rebirth broadly defined, up to the present. The idea of progress. Humanities and cult of antiquity. Innovation in arts and letters. Traversing the globe. Quest for virtue, fame, glory. Questioning the past. The nature of genius.

## HUM 407. Rationalists and Romantics (3) [GE]

Eighteenth century Enlightenment and its descendants. Rational interaction with the world. Literature, philosophy, music, art, and poetry representing rationalist and romantic ideologies. Conquest of nature and retreat to nature. Reason versus passion. Romantic responses to rationalists.

## HUM 408. The Modern (3) [GE]

Conceptualizing past and present. Valorization of the new and improved. Cultural products of imperialism, monopoly, consumerism, mass media, and corporate identity. The culture of the "Other." Literary, artistic, and intellectual breakthroughs of the nineteenth and twentieth centuries and their influences.

## HUM 409. The Future (3) [GE]

Conceiving of time and visions for tomorrow in an ever-changing world. Being human in an age of artificial intelligence and cloning. Utopian and dystopian visions. Thinkers, artists, and scientists from past and present contemplate the unknown. Breakthroughs and possibilities.
HUM 410. Studies in Popular Culture (3) [GE]
Popular culture informed by significant cultural discourses, historical developments, and political debates. Representative works to include secondary critical readings, animated film, comics, literature, live-action film, and television.
HUM 411. Understanding Evil (3) [GE]
(Same course as Religious Studies 411)
Evil and how the language of evil has been used by diverse religious communities. Conceptions and portrayals of demons, hell, Satan, and vampires. Literature on the Holocaust, terrorism, torture, and war.

## HUM 412. Science and the Humanities (3) [GE]

How developments in science and technology have informed artistic, literary, and philosophical production throughout the modern era.

## HUM 413. Theory in the Humanities (3) [GE]

Prerequisite: Humanities 101, 102, or upper division standing.
Humanistic inquiry. Theories and theoretical debates across geographical borders. Foundational theories and recent interventions.
HUM 490. Senior Seminar in Classics and Humanities (3)
Prerequisite: Classics or humanities major with more than 90 units; others with consent of department chair.

Senior capstone seminar in major. Discussion and research on topic in classics and humanities. Formal research paper.

HUM 496. Topics in Humanities (3)
Interdisciplinary topics in literature and the arts. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Maximum credit six units.

## HUM 499. Special Study (1-3)

Prerequisites: Consent of instructor and department chair.
Directed individual study. Maximum credit six units.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

HUM 504. The Dark Ages (3)
(Same course as History 504)
Europe and the Mediterranean, sixth to eleventh centuries C.E. through various approaches: political, economic, social, and cultural. Topics include: barbarians and Vikings, the Byzantine, Arab, and Holy Roman Empires, the Norman Conquest, Charlemagne, Beowulf, feudalism, and serfdom.
HUM 506. The Renaissance (3)
(Same course as History 506)
Intellectual, artistic, social, and economic transformation in Europe from fourteenth to seventeenth centuries.
HUM 580. Topics in the Humanities (3)
Prerequisites: Three units of humanities and upper division or graduate standing.

Advanced systematic study of a motif or theme in the humanities. See Class Schedule for specific content. May be repeated with new content. Maximum credit six units.
HUM 596. Topics in Humanities (1-3)
Prerequisites: Upper division standing and consent of instructor. Interdisciplinary topics in literature and the arts. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. No more than six units of 596 may be applied to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.
HUM 599. Special Study (1-3)
Prerequisites: Consent of major or graduate adviser; to be arranged by department chair and instructor.

Directed individual study. Maximum credit six units.

## Information Systems

Refer to "Management Information Systems" in this section of the catalog.

# Interdisciplinary Programs 

## Interdisciplinary Programs Offered

Major in interdisciplinary studies in three departments with the B.A. degree in liberal arts and sciences.
Major in urban studies with the B.A. degree in liberal arts and sciences.
Minor in African studies.
Minor in energy studies.
Minor in interdisciplinary studies, honors.
Certificate in environmental studies.

For information on additional interdisciplinary programs, refer to this section of the catalog under the headings of Arabic, Asian Studies, Child and Family Development, Comparative International Studies, Comparative Literature, Environmental Sciences, European Studies, Gerontology, Humanities, International Business, International Security and Conflict Resolution, Jewish Studies, Language, Culture, and Society, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Studies, Social Science, and Sustainability.

## INTERDISCIPLINARY STUDIES <br> IN THREE DEPARTMENTS

In the Division of Academic Engagement and Student Achievement
OFFICE: Administration 101
TELEPHONE: 619-594-5842 / FAX: 619-594-7934

## The Major

Interdisciplinary Studies in Three Departments (IS3D) is a stu-dent-designed major incorporating three different disciplines into a unified theme. The application process includes submission of a master plan and the selection of lower and upper division coursework in three participating departments. Visit http://is3d.sdsu.edu for additional information.

## Retention Policy

The Division of Academic Engagement and Student Achievement expects all students in the Interdisciplinary Studies in Three Departments (IS3D) major to make reasonable academic progress towards their degree. IS3D students who are not following the requirements identified in their custom IS3D master plan may be removed from the major and moved to undeclared status.

## Impacted Program

The interdisciplinary studies in three departments major is an impacted program. To be admitted to the interdisciplinary studies in three departments major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Advising

Preliminary approval of the major must be secured from the interdisciplinary studies in three departments (IS3D) advisers in the Division of Academic Engagement and Student Achievement. Acceptance into the program also requires approval from each of three departmental advisers. Information regarding participating departments and procedures for applying is available on the IS3D website: http://is3d.sdsu.edu.

## Interdisciplinary Studies in Three Departments Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 49993) (SIMS Code: 880204)
All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

The student master plan must be approved (AD-101) before this major may be declared.

A minor is not required with this major.
Preparation for the Major. A minimum of two courses (normally defined as six semester units) in each of the three departments selected in the major must be completed in the lower division as foundation for upper division courses. In departments where lower division offerings are insufficient to meet this requirement, the total minimum upper division requirement may be extended.

Some departments have specific guidelines for students to follow when selecting preparation for the major courses. Visit http:// is3d.sdsu.edu for details.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of this catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units selected from three departments: (a) with no fewer than nine units from each of the three departments; and (b) with no fewer than six units from each of the three departments completed at San Diego State University; and (c) with minimum overall and San Diego State University grade point averages of 2.0 in each of the three departments. Some departments have specific guidelines for students to follow when selecting major courses. Visit http://is3d.sdsu.edu for details.

## URBAN STUDIES

## In the College of Arts and Letters

OFFICE: Department of Geography, Storm Hall 314
TELEPHONE: 619-594-5437 / FAX: 619-594-4938

## Faculty

Urban studies is administered by the Urban Studies Committee. The program draws upon courses offered by faculty in the Departments of Anthropology, Chicana and Chicano Studies, Economics, Geography, Latin American Studies, Political Science, Public Affairs, and Sociology.
Chair: Marcelli, P. (Geography)
Undergraduate Adviser: Marcelli, P. (Geography)
Committee: Bosco (Geography), Marcelli, E. (Sociology), Marcelli, P. (Geography), Pérez (Anthropology)

## The Major

The major in urban studies is designed to prepare students for career opportunities in the urban milieu by providing an interdisciplinary major focused on the urban community, its environment and problems. The major combines the study of broad issues and theoretical concerns with specialized training in urban analytical research methodologies.

## Impacted Program

The urban studies major is an impacted program. To be admitted to the urban studies major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Advising

All urban studies majors must meet at least once each semester with the urban studies undergraduate adviser for advice on meeting general program requirements.

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Urban Studies Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 22141)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements in the section of this catalog on "Graduation Requirements." Students are cautioned that several of the required and elective courses have prerequisites.

A minor is not required with this major.
Preparation for the Major. Anthropology 102 or Public Administration 200; Economics 101 or 102 or Political Science 101 or 102; Geography 102; Sociology 101; and Economics 201 or Political Science 201 or Sociology 201 or Statistics 250. (15 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to the section of this catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of $C(2.0)$ or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include:

1. Nine units of Urban Theory selected from Chicana and Chicano Studies 355 [or Latin American Studies 355]; Geography 354; Political Science 422, Public Administration 320, Sociology 448;
2. Nine units of Urban Methods selected from Economics 301, Geography 380, 381, 385, 484, 584, 585, 586, 589, 590, Public Administration 420, Sociology 301, 406, 407, 408;
3. Three units of high impact learning and the submission of a capstone portfolio to the undergraduate adviser. This requirement may be met with Geography 590 or 595 . Other high impact courses or study abroad may qualify if appropriate and preapproved by the undergraduate adviser:
4. Fifteen units selected from an area of specialization:

Urban Cultures and Societies (SIMS Code: 117011). Anthropology 533, Chicana and Chicano Studies 303, 375, Geography 312, 354 (if not taken as a requirement), 554, Latin American Studies 320, 550, Sociology 355, 443, 448 (if not taken as a requirement), 457.
Urban Planning, Design, and Management (SIMS Code: 117012). Geography 354 (if not taken as a requirement), 575, Public Administration 310, 320 (if not taken as a requirement), 350, 460, 485, 520, 525.

Urban Political Economy and Public Policy (SIMS Code: 117013). Chicana and Chicano Studies 301, 306, 355 [or Latin American Studies 355] (if not taken as a requirement), Economics 401, Geography 348, 353, 354 (if not taken as a requirement), Latin American Studies 430 [or Political Science 430], Political Science 335, 422 (if not taken as a requirement).
Urban Sustainability (SIMS Code: 117014). Anthropology 353 [or Sustainability 353], 532, Economics 455, Geography 340, 354 (if not taken as a requirement), 370, 375, 409, 440 [or Political Science 440], 454, 572, 591 and 591L, 592 and 592L, History 584, Political Science 334 [or Sustainability 334].

## INTERDISCIPLINARY MINORS

## African Studies Minor

(Minor Code: 22149) (SIMS Code: 110101)
Dr. Charles P. Toombs, Department of Africana Studies, is adviser for this minor.

The minor in African Studies consists of a minimum of 15 upper division units selected from Africana Studies 465 [or French 465], 470, 472; Political Science 364; Religious Studies 328.

Courses in the minor may not be counted toward the major in Africana studies, humanities, political science, or religious studies, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Energy Studies Minor

## (Minor Code: 19021) (SIMS Code: 777716)

Contact the director for the Center for Energy Studies (CES) for more information on this minor.

The interdisciplinary minor in energy studies consists of a minimum of 15 units, at least 12 units of which must be upper division, to include Economics 456*, Environmental Science 301, Mechanical Engineering 350*; and six units selected from Art 247 or 347, Economics 455, Electrical Engineering 380*, 480*, Mechanical Engineering 552*, 556*, Geography 370*, Political Science 334 [or Sustainability 334], or three units of 499 with the approval of the adviser.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Courses in the major department or required for the major may not be used to satisfy requirements for the minor.

## *Additional prerequisites required

## Honors Minor in Interdisciplinary Studies <br> (Minor Code: 49993) (SIMS Code: 888001)

The Honors Minor in Interdisciplinary Studies consists of 16 units of honors interdisciplinary seminars and honors sections of general education courses, of which four units are lower division and 12 units are upper division. A maximum of three units of honors sections of general education courses may be counted to satisfy the requirements of the minor. Students must complete a study abroad experience. Students must be admitted to the Weber Honors College at the time they declare the minor.

Preparation for the Honors Minor (4 units). Honors College 100 and 113.

Upper Division for the Honors Minor (12 units). Honors College 313 ( 6 units), 495 and three units selected from Honors College 413 or honors sections of general education courses (Anthropology 402; Humanities 370, 405 [or Religious Studies 405], 409; Sociology 320).

Courses in the major department or required for the major may not be used to satisfy requirements for the minor. A minimum of six upper division units must be completed in residence at San Diego State University.

Study Abroad Requirement. All honors minor students are required to complete a credit-bearing study abroad experience prior to their final semester at SDSU.

To meet the study abroad requirement, minors must complete one of the following:

1. An approved SDSU international program, either listed in the SDSU Aztecs Abroad database or approved by SDSU through pre-departure permission from the honors adviser; or;
2. One course selected from:

- Asian Studies 490;
- Education 450;
- General Studies 450;
- Health and Human Services 290 or 350;
- International Security and Conflict Resolution 450;
- Latin American Studies 320, 350, 450, or 550;
- Political Science 450;
- Public Health 550;
- Science 350.


## INTERDISCIPLINARY CERTIFICATE

## Environmental Studies Certificate

## (SIMS Code: 112999)

The Environmental Studies Certificate is designed for students already holding a bachelor's degree (in any field) who desire to increase their understanding of the theoretical and applied approaches to environmental problems and issues. This is not a certificate program in the hard sciences, but rather is intended to provide diverse ways for students to develop knowledge of the causes and consequences of the human impact on the environment and the impact on humans of philosophical, political, economic, spatial, and natural science perspectives. This professional development program offers a multi-disciplinary approach to environmental studies for natural resource managers, teachers, community activists, and others who are concerned about the interaction of people and the environment.

Students must complete the required units with a 2.5 grade point average. A bachelor's degree from a university is also required.

The certificate requires 15 units to include nine units selected from Economics 455, Geography 370, 573, International Security and Conflict Resolution 300, Oceanography 320, Political Science 334 [or Sustainability 334]; and six units selected from Biology 315, 324, 327, Economics 456, Geography 409, 570, 572, 574, Geological Sciences 301, 303, History 441, International Security and Conflict Resolution 301, Philosophy 332 [or Sustainability 332], Public Health 304, Recreation and Tourism Management 487. Core courses can be counted in only one category; 500-numbered courses may have substantial prerequisites, but may be counted later for graduate credit toward an M.A. degree.

Students interested in the Environmental Studies Certificate will normally enroll in courses through Open University. Prior to enrollment, contact Dr. Donna L. Ross, School of Teacher Education, to develop an approved program of coursework.

## International Business

In the College of Arts and letters and the Fowler College of Business

OFFICE: Arts and Letters 208
TELEPHONE: 619-594-4505 / FAX: 619-594-7738
E-MAIL: ib@sdsu.edu
WEBSITE: http://ib.sdsu.edu
A member of AACSB International-The Association to Advance Collegiate Schools of Business.

## Faculty

International business draws on courses offered by faculty in the following areas: Accountancy, Africana Studies, American Indian Studies, Anthropology, Arabic, Art, Asian Studies, Chicana and Chicano Studies, Chinese, Communication, Comparative Literature, Economics, English, European Studies, Finance, French, Geography, German, History, Humanities, Italian, Japanese, Korean, Latin American Studies, Linguistics, Management, Management Information Systems, Marketing, Philosophy, Political Science, Portuguese, Religious Studies, Rhetoric and Writing Studies, Russian, Sociology, Spanish, and Women's Studies.
Director: John C. Putman (History)

## Offered by International Business

Major in international business with the
B.A. degree in liberal arts and sciences.

Emphases in language: Arabic, Chinese, English, French, German, Italian, Japanese, Korean, Portuguese, Russian, Spanish.
Emphases in regional/cultural studies: Asia, Latin America, Middle East and North Africa, North America, Central Europe, Western Europe.

## The Major

International business is an interdisciplinary major that culminates in a Bachelor of Arts degree offered jointly by the College of Arts and Letters and the Fowler College of Business. This program integrates coursework in business administration, foreign language, and regional / cultural studies. It offers students an opportunity to combine two emphases, one in a language and one in regional/ cultural studies, and to create a focused program of study suited to their individual interests and career goals. All students are required to spend a semester abroad and to complete an internship.

Students must select one of the following regional/cultural studies emphases: Asia/Chinese, Asia/Japanese, Asia/Korean, Latin America/Portuguese, Latin America/Spanish, Middle East and North Africa/Arabic, North America/English, North America/French, Central Europe/Russian, Western Europe/French, Western Europe/ German, Western Europe/Italian, Western Europe/Portuguese, Western Europe/Spanish. Students also complete the necessary business courses to meet accreditation standards of the AACSB for a major in business administration.

High school students who are planning to select this major are strongly advised to complete the following courses prior to admission to the university: four years of one foreign language; four years of mathematics; and courses in accounting, computer programming, economics, and world history.

## Retention Policy

The international business program expects all students to make reasonable academic progress towards the degree. Premajors who have earned 60 units but have less than a 2.9 cumulative GPA will be removed from the international business premajor and placed in undeclared. Upper division business majors earning less than a 2.0 average GPA in the major for two consecutive semesters may be removed from the major and placed in undeclared.

## Semester Abroad Requirement

As part of the degree requirements for the international business major, students must complete a semester abroad in their region and language of emphasis. Students must meet eligibility requirements prior to the semester abroad and complete a global business project. In order to clear the semester abroad requirement, students select an international business approved program. Three program options are offered (programs vary by location; consult department for options):

1. Study Abroad
a. Students selecting this option spend one semester (fall or spring) studying abroad.
b. Full-time registration required abroad (equivalent to 12 SDSU units).
c. All courses must successfully be completed with a passing grade.
2. Internship Abroad
a. Students selecting this option must spend 250 hours at an internship located in their region and language of emphasis.
b. Choosing this option allows students to complete the semester abroad requirement and internship requirement concurrently.
3. Study + Internship Abroad
a. Students selecting this option will combine courses with an internship.
b. Programs vary in length and availability.

NOTE: International students registering in the English/North America emphasis meet the semester abroad requirement by studying at SDSU.

## Internship Requirement

All students in the international business major must complete an international business internship by enrolling in International Business 495 and interning a minimum of 150 hours. Students must attain upper division status prior to starting the internship. Although not required, students may choose to complete an internship abroad. Internships must be completed with approval of the internship adviser.

## Impacted Program

The international business major is an impacted program. To be admitted to the international business major, students must meet the following criteria:
a. Complete with a grade of C (2.0) or better: Accountancy 201 and 202; Economics 101 and 102; Economics 201 or Statistics 119; Finance 240; and Management Information Systems 180. These courses cannot be taken for credit/no credit (Cr/NC);
b. Complete or test out of one language sequence: Arabic 101, 102, 201, 202 (16 units); Chinese 101, 102, 201, 202 (20 units); English: Communication 103, Linguistics 100B, 200, Rhetoric and Writing Studies 290 (12 units); French 100A, 100B, 201, 210, 221 (20 units); German 100A, 100B, 202, 205A, 205B (21 units); Italian 100A, 100B, 201, 211, 212 (21 units); Japanese 111, 112, 211, 212 (20 units); Korean 101, 102, 201, 202 (20 units); Portuguese 101, 102, 203, 204 (16 units); Russian 100A, 100B, 200A, 200B (20 units); or Spanish 101, 102, 201, 202, 211, 212 (22 units). These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
c. Complete with a grade of $C(2.0)$ or better, the regional/cultural studies emphasis from one of the following regions: Middle East and North Africa: History 101; Asia (Chinese): Asian Studies 100; Asia (Japanese or Korean): Asian Studies

100 or 101; Latin America: Latin American Studies 101; North America: (English); Six units (one pair) selected from History 109, 110 or Political Science 101, 102; North America: (French); History 110 or Political Science 102; Central Europe: European Studies 101 or History 106 (recommended); Western Europe: European Studies 101 or History 106 (recommended). These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
d. Complete a minimum of 60 transferable semester units;
e. Have a cumulative GPA of 2.90 or better.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Advising

All students admitted to the university with a declared major in international business are required to attend an advising meeting with the international business adviser during their first semester on campus.

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## International Business Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 05131)

| Language | Region | SIMS Code |
| :--- | :--- | :--- |
| Arabic | Middle East and North Africa | 113688 |
| Chinese | Asia | 113602 |
| English | North America | 113650 |
| French | North America | 113622 |
|  | Western Europe | 113613 |
| German | Western Europe | 113614 |
| Italian | Western Europe | 113616 |
| Japanese | Asia | 113603 |
| Korean | Asia | 113639 |
| Portuguese | Latin America | 113610 |
| Russian | Western Europe | 113617 |
| Spanish | Central Europe | 113608 |
|  | Latin America | 113612 |
|  | Western Europe | 113619 |

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

International business majors may not double major in the Fowler College of Business or in the language or regional/cultural emphases used to satisfy major requirements. International business majors may minor in their chosen area of focus, but the same course cannot be used to fulfill both the focus and the minor.

No courses in the preparation for the major may be taken for Cr / NC; the minimum grade in each course in lower division business and regional/cultural studies is C .

Preparation for the Major. (Complete I, II, and III: 39-46 units) I. Business: Accountancy 201, 202; Economics 101, 102; Economics 201 or Statistics 119; Finance 240; and Management Information Systems 180. (21 units)
II. Language Emphasis (choose one language): The lower division language course requirements may also be satisfied by successful results on certain standardized language examinations; contact the adviser of the appropriate language department for details. International business students whose high school language of instruction was taught in a language other than English may not take that language as their emphasis in the major (contact the international business office for further explanation). English is not open to native speakers of English nor to students who graduated from
a secondary school where English was the principal language of instruction nor to students with near-native fluency as evidenced through an ACTFL rating of Distinguished Level.

Arabic 101, 102, 201, 202. (16 units)
Chinese 101, 102, 201, 202. (20 units)
English: Communication 103, Linguistics 100B, 200, Rhetoric and Writing Studies 290. (12 units)
French 100A, 100B, 201, 210, 221. (20 units)
German 100A, 100B, 202, 205A, 205B. (21 units)
Italian 100A, 100B, 201, 211, 212. (21 units)
Japanese 111, 112, 211, 212. (20 units) (Not open to speakers of Japanese who have completed compulsory education through junior high school in Japan.)
Korean 101, 102, 201, 202. (20 units)
Portuguese 101, 102, 203, 204. (16 units)
Russian 100A, 100B, 200A, 200B. (20 units)
Spanish 101, 102, 201, 202, 211, 212. Spanish 281 replaces 201 and 211; and Spanish 282 replaces 202 and 212 for U.S. Hispanics. (22 units)
III. Regional/Cultural Studies Emphasis (choose one region):

Asia (Chinese): Asian Studies 100.
Asia (Japanese or Korean): Asian Studies 100 or 101.
Latin America: Latin American Studies 101.
Middle East and North Africa: History 101.
North America (English): Six units (one pair) selected from History 109, 110 or Political Science 101, 102.
North America (French): History 110 or Political Science 102.
Central Europe: European Studies 101 or History 106 (recommended).
Western Europe: European Studies 101 or History 106 (recommended).
Language Requirement. The language requirement is automatically fulfilled through coursework for preparation for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. (Complete I, II, and III below: 49-54 units) A minimum grade point average of 2.0 in each of the three areas is required for graduation. No course in the major may be taken $\mathrm{Cr} / \mathrm{NC}$ unless the course is only offered $\mathrm{Cr} / \mathrm{NC}$.
I. Business (All preparation for the major in the business and language portions of this major must be completed, plus additional supplementary admissions criteria must be met, before enrolling in any upper division courses in Business Administration):

A minimum of 30 upper division units to include Business Administration 300, 310, 323, 350, 360, 370, 405; Finance 329; Marketing 376.

Focus (complete one of the following focus areas):
Economics: Two 300- or 400-level courses in economics, excluding Economics 495, 496, 499. Recommended: Economics 330, 360.
Entrepreneurship: Management 358 and one course selected from Finance 328, Management 353, 355, 452, 455, 459, or 460.

Finance: Two 300- or 400-level courses in finance, excluding Finance 496, 498, 499.
Management: Two 300- or 400-level courses in management, excluding Management 401, 496, 498, 499. Recommended: Management 357.
Management Information Systems: Two 300- or 400-level courses in management information systems, excluding Management Information Systems 496, 498, 499.
Marketing: Two 300- or 400-level courses in marketing, excluding Marketing 496, 498, 499.
II. Language Emphasis (choose one language): Arabic 301, 302, 350. (12 units)

Chinese 301, 302, and either 431 or 434 . (9 units)
English: Communication 371; Linguistics 305W or Rhetoric and Writing Studies 305W; Linguistics 350, 352, or 420; Rhetoric and Writing Studies 503W. (12 units)
French 301, 302, 423. (9 units)
German 300, 301, and three units selected from German 400, 411, 430. (9 units)
Italian 301, 305A, 305B, 421, 422, or 424 . (select 9 units)
Japanese 311, 312, 321 or 322. (9 units) (Not open to speakers of Japanese who have completed compulsory education through junior high school in Japan.)
Korean 301, 302, 331. (9 units)
Portuguese (Latin America): Portuguese 311 or 312, 443, and 535 or 540. (9 units)
Portuguese (Western Europe): Portuguese 311 or 312, 443, and 530 or 540. (9 units)
Russian 301, 303, 430. (9 units)
Spanish 301, 302 (or 381 or 382 and either 350, 491, or 493), 307 (9 units). Spanish 381 or 382 replaces 301 and 302 for U.S. Hispanics.
III. Regional/Cultural Studies Emphasis (Choose one region/language combination). All international business majors are required to complete a study abroad or internship abroad experience of at least one semester in length. See the international business study abroad adviser to arrange for the study abroad and the internship adviser to contract for the internship. Students who choose the study abroad option are still required to complete an internship (International Business 495). Students who choose the internship abroad option may earn credit for International Business 495. All students must complete International Business 495 and 498 (four units). In addition, all students must complete six units selected from the following groups of courses.
Asia/Chinese: International Business 430; Asian Studies 300, 320, 351 [or Philosophy 351], 421 [or History 421], 458 [or Religious Studies 458]; Chinese 433; History 420, 566, 567; Political Science 362, 365; Religious Studies 338, 345.
Asia/Japanese: International Business 430; Asian Studies 300, 320, 421 [or History 421], 458 [or Religious Studies 458]; History 420, 570; Japanese 321, 322, 411, 412, 421, 422, 480; Philosophy 353; Political Science 362, 575; Religious Studies 341.
Asia/Korean: International Business 430; Asian Studies 300, 320, 421 [or History 421], 458 [or Religious Studies 458]; History 420; Korean 321 [or Asian Studies 321], 430 [or Asian Studies 430]; Philosophy 353; Political Science 362, 575; Religious Studies 345.

Latin America/Portuguese: Anthropology 442; Economics 464; Geography 324; History 415 [or Latin American Studies 415], 416, 557, 558; International Business 410; Latin American Studies 307 [or Portuguese 307], 325, 366 [or Political Science 366]; Political Science 566, Portuguese 306 [or Latin American Studies 306], 311, 312, 535, 540.
Latin America/Spanish: Anthropology 442; Chicana and Chicano Studies 355 [or Latin American Studies 355]; Comparative Literature 445; Economics 464; Geography 324; History 416, 551, 558; International Business 410; Latin American Studies 350, 366 [or Political Science 366], 420, 545; Political Science 482, 566, 568; Spanish 341, 342, 407; Women's Studies 512.
Middle East and North Africa/Arabic: Arabic 330; Economics 466; History 473, 474, 488, 501, 574; Political Science 363; Religious Studies 310, 328, 330.
North America/English: Africana Studies 321, 341, 422; American Indian Studies 320, 331 [or Political Science 331], 440; Anthropology 439; Chicana and Chicano Studies 301, 320, 350B; Economics 338; Geography 321; History 422 [or Asian Studies 422], 536, 537, 548 [or Chicana and Chicano Studies 548]; Humanities 370; Political Science 305, 347A, 347B, 435, 436, 533; Religious Studies 390B, Sociology 421, Women's Studies 341B.
North America/French: Africana Studies 321, 422; American Indian Studies 320, 331 [or Political Science 331]; Anthropology 439; Chicana and Chicano Studies 320, 350B; Economics 338; Geography 321; History 422 [or Asian Studies 422], 536,

537, 548 [or Chicana and Chicano Studies 548]; Humanities 370; Political Science 305, 336, 347A, 347B, 435, 436, 533; Religious Studies 390B; Sociology 421; Women's Studies 341B.
Central Europe/Russian: International Business 420; European Studies 301, 435, 440; Geography 336; History 408; Humanities 330; Political Science 359; Russian 305B, 310, 311, 435, 441, 501.
Western Europe/French: International Business 420; Art 557; European Studies 301, 424, 440, 501; French 305B, 421, 422, 424; Geography 336; History 407, 408; Humanities 310, 408; Political Science 356.
Western Europe/German: International Business 420; European Studies 301, 424, 440, 501; Geography 336; German 320, 400, 410, 411, 430, 520; History 407, 408, 512B; Humanities 408; Political Science 356.
Western Europe/Italian: International Business 420; European Studies 301, 424, 440, 501; Geography 336; History 407, 408, 506; Humanities 408; Italian 305A, 305B, 421, 422, 424; Political Science 356.
Western Europe/Portuguese: International Business 420; European Studies 301, 424, 440, 501; Geography 336; History 407, 408; Humanities 408; Political Science 356; Portuguese 306 [or Latin American Studies 306], 311, 312, 530, 540.
Western Europe/Spanish: International Business 420; European Studies 301, 424, 440, 501; Geography 336; History 407, 408; Humanities 408; Political Science 356; Spanish 340, 407, 501.
A maximum of six units of courses numbered 496 and 596 may be applied to the major with the approval of the international business adviser.

## Courses (IB)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

I B 295. Internship Experience (1-3) $\mathrm{Cr} / \mathrm{NC}$
Prerequisites: Consent of instructor and a minimum of 15 units taken at SDSU with a GPA of 2.9 or better.

Internship in business or community setting. Work done under joint direction of activity sponsor and instructor. Project assignments and minimum hour requirement depending on units. Not applicable to the major. Maximum credit six units.

## I B 296. Topics in International Business (1-3)

Selected topics in international business. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

## I B 299. Special Study (3-6)

Prerequisite: Pre-International Business major.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Intended for Undergraduates)

## I B 410. Doing Business in Latin America (3)

Prerequisites: Business Administration 310, 350, and 370 with a grade of $C(2.0)$ or better in each course.

Business and managerial methods, practices, and systems in Latin American markets.

## I B 420. Doing Business in Europe (3)

Prerequisites: Business Administration 310 and 350 with a grade of $C$ (2.0) or better in each course.

Business and managerial methods, practices, and systems in European markets.
I B 430. Doing Business in Asia (3)
Prerequisites: Business Administration 310 and 350 with a grade of $C$ (2.0) or better in each course.

Business and managerial methods, practices, and systems in Asian markets.

I B 495. International Business Internship (3) Cr/NC
Prerequisites: Consent of instructor; upper division standing in the major.

Internships with international business firms, nonprofit organizations, and government agencies in U.S. and abroad. Work done under joint direction of activity sponsor and instructor. Project report and internship orientation required. Maximum credit six units with consent of instructor.
I B 498. Doing Business Internationally (1) $\mathrm{Cr} / \mathrm{NC}$
Prerequisite: Upper division status in the major.
Required business customs and protocol course pertinent to all regions.

## I B 499. Special Study (1-6)

Prerequisite: International business major. Individual study. Maximum credit six units.

## UPPER DIVISION COURSE

(Also Acceptable for Advanced Degrees)
I B 596. Topics in International Business (1-3)
Prerequisite: Upper division standing.
Selected topics in international business. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

# International Security and Conflict Resolution 

In the College of Arts and letters, the College of Professional Studies and Fine Arts, and the College of Sciences

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The international security and conflict resolution (ISCOR) major at San Diego State University is an innovative interdisciplinary program designed to provide students with a sophisticated understanding of the political, moral, socioeconomic, and cultural dimensions to global conflict. Its interests extend well beyond conventional international security issues to encompass the broader analysis of global affairs. ISCOR exposes students to a multiplicity of ideological, regional, and cultural perspectives. Students will attain a comprehensive and multifaceted understanding of global affairs and the challenges to building a more peaceful, just, and ecologically sustainable global order. ISCOR students will develop a rich appreciation of both increased global interconnections (sometimes known as globalization) and enduring diversity in cultural practices, political systems, and economic systems. Students will also sharpen their skills in research and critical reasoning and develop expertise in specific global issues. Upon graduation, ISCOR students will be well positioned for advanced studies or for embarking upon careers in positions related to global affairs.

The ISCOR program features three specializations: cooperation, conflict, and conflict resolution; environment and security; and justice in the global system. All students are expected to study abroad and given the option of doing an internship or senior thesis.

## Faculty

Program Director: Latha Varadarajan (Political Science) Undergraduate Adviser: G. Allen Greb (Political Science)

## Offered by International Security and Conflict Resolution

Major in international security and conflict resolution with the
B.A. degree in liberal arts and sciences.

Minor in international security and conflict resolution.

## The Major

International security and conflict resolution is an interdisciplinary program leading to a Bachelor of Arts degree in liberal arts and sciences. The program integrates coursework from natural sciences, social and behavioral sciences, and humanities.

In order to provide breadth and depth for the courses of study, all students are required to complete a set of core courses addressing the major themes of the development of global systems and the nature of conflict and conflict resolution. In addition, all students must select an integrated set of courses from different disciplines focused on an area of specialization in cooperation, conflict, and conflict resolution; environment and security; or in justice in the global system.

## Advising

Students are required to meet with the undergraduate adviser in order to declare the major. All students admitted to the university with a declared major in international security and conflict resolution are urged to meet with the undergraduate adviser during their first semester.

## Impacted Program

The international security and conflict resolution (ISCOR) major is an impacted program. To be admitted to the international security and conflict resolution (ISCOR) major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## International Security and Conflict Resolution Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 22103)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." Individual master plans for each student are filed with the ISCOR undergraduate adviser.

A minor is not required with this major.
It is strongly recommended that international security and conflict resolution majors consider either a minor or a second major in a foreign language. In addition, international security and conflict resolution majors may wish to obtain language certification in a foreign language. Many career positions related to an international security and conflict resolution major will require demonstrated competency in a foreign language.

It is also recommended that international security and conflict resolution majors consider a minor in an area studies program, e.g., African Studies, Asian Studies, European Studies, Islamic and Arabic Studies, or Latin American Studies. Many career positions related to an international security and conflict resolution major will require a strong background in a particular region and/or culture. The program also requires at least one preapproved study abroad experience.

Study Abroad Requirement. All international security and conflict resolution majors are required to complete a study abroad experience. To meet this requirement, majors must complete one of the following with the preapproved and written consent of the undergraduate adviser:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Semester Abroad Program;
4. An SDSU Study Travel Program;
5. An international security and conflict resolution internship abroad, independent study abroad, or thesis abroad;
6. International Security and Conflict Resolution 450.

See the undergraduate adviser to make arrangements to meet the study abroad requirement.

Preparation for the Major. (27 units) International Security and Conflict Resolution 200; Economics 101, 102; History 101; Political Science 103; Religious Studies 101; and three units from each of the following groups:

1. Anthropology 102 or Geography 102;
2. Comparative Literature 270B, History 100, or Philosophy 101;
3. Economics 201, Political Science 201, Psychology 280, Sociology 201, Statistics 119 or 250.
Recommended for General Education in Foundations of Learning, Life Sciences: Biology 100 or 101; Physical Sciences: Chemistry 100 or Geography 101.

Language Requirement. A minimum competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement (excluding American Sign Language). Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include 15 units in International Security and Conflict Resolution 300, 301, 310, either 495 or 497, Political Science 375; six units selected from International Security and Conflict Resolution 320, 324, 421 (students specializing in justice in the global system must select International Security and Conflict Resolution 324); and 15 units from one of the three specializations: cooperation, conflict, and conflict resolution; environment and security; or justice in the global system.

Master Plan. A master plan of the courses taken to fulfill the major must be approved by the undergraduate adviser.

## Specialization in Cooperation, Conflict, and Conflict Resolution

## (SIMS Code: 113803)

This specialization is concerned with exploring the causes, nature, consequences, management, and resolution of conflict. It will consider the psychology, sociology, economics, politics and history of cooperation, conflict and conflict resolution. It will address issues of war and peace, nationalism, civil war, terrorism, human rights, and ethnic hostility as they impact international security.

Requirements for specialization. A minimum of 15 units to include six units selected from International Security and Conflict Resolution 421, Communication 371++, Philosophy 340, Political Science 370; and nine units selected from courses listed above or from Anthropology 350++, 533+, Chicana and Chicano Studies 355 [or Latin American Studies 355], Communication 555+, Economics 360, 561+, History 486, 516, 567, 574, Political Science 361, 363, 364, 380, 393, 430 [or Latin American Studies 430], 479, 485, 555, 577, Religious Studies 379, Sociology 433+, 457+, Women's Studies 310, 375. International Security and Conflict Resolution 450+ can be substituted for a maximum of one three unit course in this specialization with the approval and written consent of the undergraduate adviser.

## Specialization in Environment and Security <br> (SIMS Code: 113804)

Issues related to the environment and the utilization of energy and natural resources are important aspects of international security and often are related to cooperation and conflict between nations and groups within states. The purpose of this specialization is to provide the student with the necessary background to better understand this aspect of international security and the management and resolution of conflict.

Requirements for specialization. A minimum of 15 units to include nine units selected from Biology 315; Economics 456; Environmental Science 301; Geography 370; Political Science 334 [or Sustainability 334], 564; Public Health 362; Sociology 350++; and six units selected from courses listed above or from Biology 324, 354+; Economics 455; Geography 570+, 574+; History 441; Philosophy 329, 332 [or Sustainability 332]; Public Health 304+. International Security and Conflict Resolution 450+ can be substituted for a maximum of one three unit course in this specialization with the approval and written consent of the undergraduate adviser.

## Specialization in Justice in the Global System (SIMS Code: 113805)

This specialization explores political, economic, and social issues relating to global justice. It includes the study of international organizations and law, human rights, North-South relations, and controversies over distribution of resources. This specialization enables students to have a richer understanding of the dynamics concerning international security and conflict resolution.

Requirements for specialization. A minimum of 15 units to include nine units selected from History 440, Philosophy 340, 344, Political Science 302, 380, 485, Sociology 450+; and six units selected from courses listed above or from Africana Studies 472, Economics 360, 365, 561+, Health and Human Services 350, History 516, Political Science 334 [or Sustainability 334], 406, 430 [or Latin American Studies 430], 507, 565, 577, Public Health 362, Religious Studies 379, Sociology 433+ 457+, Women's Studies 310,530, 580, 581. International Security and Conflict Resolution $450+$ can be substituted for a maximum of one three unit course in this specialization with the approval and written consent of the undergraduate adviser.
+Course requires prerequisites other than those listed above.
++Additional prerequisites other than those listed above may be required
depending upon lower division courses taken for preparation for major (and/ or for General Education).

## International Security and Conflict Resolution Minor

## (SIMS Code: 113801)

The minor in international security and conflict resolution consists of a minimum of 18 units, with 15 units selected from International Security and Conflict Resolution 300, 301, 310, 320, 324, 421, Political Science 375, and three units selected from Anthropology 102, Economics 101, Geography 102, History 101, Political Science 103, or Religious Studies 101.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Study Abroad Requirement. All international security and conflict resolution minors are required to complete a study abroad experience.

To meet the study abroad requirement, minors must complete one of the following with the preapproved and written consent of the undergraduate adviser:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;
5. International Security and Conflict Resolution 450.

See the undergraduate adviser to make arrangements to meet the study abroad requirement.

## Courses (ISCOR)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSE

ISCOR 200. International Security and Conflict Resolution (3)
Comprehensive picture of multidisciplinary international and conflict resolution (ISCOR) program.

## UPPER DIVISION COURSES

(Intended for Undergraduates)

## ISCOR 300. Global Systems (3) [GE]

Prerequisite: Nine units of General Education requirements in Foundations of Learning, to include three units each in Natural Sciences and Quantitative Reasoning, in Social and Behavioral Sciences, and in Humanities.

Evolution and development of global systems, characteristics of contemporary and global systems and formulation of criteria for projecting the future of the systems.

## ISCOR 301. Conflict and Conflict Resolution (3) [GE]

Prerequisite: Nine units of General Education requirements in Foundations of Learning, to include three units each in Natural Sciences and Quantitative Reasoning, in Social and Behavioral Sciences, and in Humanities.

Conflict resolution as an emerging field; theories of conflict; methods and implications of conflict management including group, institutional, and international level analysis.
ISCOR 310. Our Global Future: Values for Survival (3) [GE]
Identifies resource and social crises toward which contemporary American values are leading, examines the nature of human action; contrasts other value systems with ours; considers origins of our values and the individual's potential for changing them. Interdisciplinary.
ISCOR 320. International Security in the Nuclear Age (3) [GE]
Prerequisites: Upper division standing. Nine units of General Education requirements in Foundations of Learning, to include three units each in Natural Sciences and Quantitative Reasoning, in Social and Behavioral Sciences, and in Humanities.

International security issues from historical, ethical, economic and sociopsychological perspectives, including the security environment after the Cold War and current sources of conflict. The proliferation of weapons of mass destruction, including nuclear weapons is discussed.
ISCOR 324. Politics of Global Resistance and Solidarity (3) [GE]
Global resistance movements that appreciates diversity in thought, experiences, and motivations. Theories of transnational activism, radical political thought, and international relations.

## ISCOR 421. Alternative Dispute Resolution: Theory and

 International Applications (3)Prerequisite: Upper division standing.
Theory of collaborative negotiation and mediation, practice of negotiation and mediation skills and techniques, and focus on personal styles of mediation and collaborative negotiating. Emphasis on resolving conflicts on the international level.
ISCOR 450. Study Abroad in International Security and Conflict Resolution (3)
Prerequisite: Upper division standing. Class Schedule may have other prerequisites.
Selected topics in international security and conflict resolution. Course taught abroad. Potential additional prerequisites and location of course and organizational meetings. May be repeated once with new content. See Class Schedule for specific content. Maximum credit six units.

## ISCOR 495. Internship in International Security and Conflict

 Resolution (3)Prerequisites: Senior standing. Nine units of international security and conflict resolution core courses and nine units in selected specialization. Consent of instructor.

Supervised internship of 150 hours in government or nongovernmental agency, office or business in an area directly related to international security and conflict resolution.

## ISCOR 496. Selected Topics in International Security and

 Conflict Resolution (1-3)Selected topics in international security and conflict resolution. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## ISCOR 497. Thesis in International Security and Conflict

 Resolution (3)Prerequisites: Senior standing. Nine units of international security and conflict resolution core courses and nine units in selected specialization. Consent of instructor.

An original and comprehensive written description and analysis of a problem or problem area in international security and conflict resolution.

## ISCOR 499. Special Study (1-3)

Prerequisites: Consent of instructor. Six units of international security and conflict resolution core courses and six units in specialization.

Individual study. Maximum credit six units.

## Islamic and Arabic Studies

Refer to "Arabic" in this section of the catalog.

# In the Department of European Studies <br> In the College of Arts and Letters 

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WEBSITE: http://italian.sdsu.edu
Faculty
Emeritus: Vergani
Chair: Donadey (Interim)
Professor: Clò
Assistant Professor: Benaglia
Lecturers: Kading, Ruggeri
Offered by the Department of European Studies
Major in European studies, with emphasis in Italian.
See European Studies.
Minor in Italian.

## Offered by International Business

Major in international business, with emphasis in Italian.

## Italian Minor

## (Minor Code: 11049) (SIMS Code: 113701)

The minor in Italian consists of a minimum of 15 units taught in Italian, nine units of which must be in upper division Italian courses. Any course taught in English needs department approval to apply to the minor requirements.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Students who minor in Italian are strongly encouraged to participate in the California State University International Programs (CSU-IP) and other approved study abroad programs in Ital-ian-speaking countries.

## Interdisciplinary Studies in Three Departments

Students selecting Italian as one of their departments in this major must complete Italian 301, all lower division competency requirements, and at least two upper division Italian courses.

## Language Requirement for the

## B.A. Degree in Liberal Arts and Sciences

Students electing the study of Italian to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Italian 201 or 211 or the equivalent level of achievement. The usual sequence of coursework is Italian 100A, 100B, and 201 or 211 . Refer to section of catalog on "Graduation Requirements" for additional ways to satisfy competency.

## High School Equivalents

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:

1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalen of three college semesters or five college quarters, thus fulfilling the language requirement.

## Courses (ITAL)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

Native speakers of Italian will not receive credit for taking lower division courses in Italian except with advance approval from the department.

All lower division courses in Italian are taught in Italian.
No credit will be given for lower division courses taken after successfully completing any upper division Italian course taught in Italian.

No credit will be given when Italian 100A, 100B, 211, 212, and 301 are taken concurrently or out of sequence. Italian 201 may only be taken after completing Italian 100B, but may be taken concurrently with Italian 211 or 212.
ITAL 100A. Elementary Italian I (5) [GE]
Pronunciation, speaking and writing, readings on Italian culture and civilization, essentials of grammar.

## ITAL 100B. Elementary Italian II (5) [GE]

Prerequisite: Italian 100A or two years of high school Italian. Continuation of Italian 100A.
ITAL 201. Reading and Speaking Italian (3) [GE]
Prerequisite: Italian 100B or three years of high school Italian. Italian minors and international business majors are encouraged to enroll concurrently in Italian 212 when available. Recommended for students wanting to satisfy the language graduation requirement.

Emphasis on spoken language with readings of cultural material serving as a basis for discussion.
ITAL 211. Intermediate Italian I (4) [GE]
Four lectures and one hour of laboratory.
Prerequisite: Italian 100B or three years of high school Italian.
Comprehensive review of Italian grammar and practice of all language skills at intermediate level within context of Italian culture.
ITAL 212. Intermediate Italian II (4) [GE]
Four lectures and one hour of laboratory.
Prerequisite: Italian 211.
Continuation of Italian 211. Comprehensive review of Italian grammar and practice of all language skills at intermediate level within context of Italian culture. Italian minors and international business majors are encouraged to concurrently register in Italian 201.

## ITAL 296. Topics in Italian Studies (1-4)

Prerequisite: Italian 100B or three years of high school Italian.
Topics in Italian language and culture. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Taught in Italian.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
All upper division courses in Italian are taught in Italian unless otherwise stated.
ITAL 301. Advanced Oral and Written Composition (3) [GE]
Prerequisites: Eleven units of 200-level Italian.
Grammar review. Reading of modern Italian prose, with written reports and oral discussions in Italian. Italian 301 is not open to students who hold the Italian secondary school diploma.
ITAL 305A. Italian Literature (3) [GE]
Prerequisites: Eleven units of 200-level Italian.
Important movements, authors and works in Italian literature from Middle Ages to the Renaissance.

ITAL 305B. Italian Literature (3) [GE]
Prerequisites: Eleven units of 200-level Italian.
Continuation of Italian 305A from the Renaissance to the present.
ITAL 421. Italian Civilization (3) [GE]
Prerequisites: Eleven units of 200-level Italian.
Major aspects of Italian civilization with emphasis on art, music, history, and cinema.

## ITAL 422. Issues in Italian Studies (3)

Interdisciplinary approach to major themes and figures of Italian culture. Emphasis on social, literary, artistic, and political movements underlying development of contemporary Italy.

## ITAL 423. Business Italian (3)

Prerequisite: Italian 212.
Italian advertising, business culture, commercial practices and language, communication, cultural management, curation, current events, marketing entrepreneurship, social and digital media.

## ITAL 424. Italian Cinema (3) [GE]

Two lectures and two hours of activity.
Prerequisite: Italian 212.
Development of Italian cinema. Pre-viewing lectures enhance cultural comprehension. Post-viewing discussions stimulate ideas for written work and final projects. Lectures and discussions in Italian.
ITAL 426. Italian American Culture (3) [GE]
Prerequisite: Upper division standing.
Italian American experience of migration, identity formation, ethnic conflict, integration and assimilation, in a variety of genres and media, from literature to film, music and theatre, fiction and non-fiction. Taught in English.

## ITAL 495. Internship (3) Cr/NC

Prerequisites: Upper division standing and consent of instructor. Practical work experience in a field related to Italian studies. Work done under joint direction of activity sponsor and instructor. Approved international internships may count toward international experience requirement for certain majors.

## ITAL 496. Selected Topics (1-4)

Topics in Italian language, literature, culture and linguistics. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit eight units. Conducted in English or in Italian.

## ITAL 499. Special Study (1-3)

Prerequisites: Italian 301 and 305A or 305B.
Individual study. Maximum credit six units. This course is intended only for students who are currently enrolled in or who already have credit for all upper division courses in Italian available in any given semester.

## UPPER DIVISION COURSE

(Also Acceptable for Advanced Degrees)
ITAL 510. Italian and Italophone Cultural Studies (3)
Prerequisites: Italian 301 and 421.
Artistic, intellectual, literary, social and political trends in Italy and in diaspora. May be repeated with new title and content. Maximum credit six units.

# Japanese 

In the Department of Linguistics and Asian/Middle Eastern Languages
In the College of Arts and Letters

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WEBSITE: http://japanese.sdsu.edu
Faculty
Emeritus: Higurashi
Chair: Samraj
Associate Professor: Kitajima
Lecturer: Kuratani
Offered by the Department of Linguistics
and Asian/Middle Eastern Languages
Major in Japanese with the B.A. degree
in liberal arts and sciences.
Minor in Japanese.
Offered by Asian and Pacific Studies
Minor in Japan studies.

## Offered by International Business

Major in international business, with emphasis in Japanese.

## The Major

Japanese experienced the fastest growth rate of all languages in U.S. higher education during the 1980s, and still maintains its popularity, because of the interdependence between the U.S. and Japan, Japan's role in the world economy, and the popularity of anime and Japanese film and music.

Students who major in Japanese will gain proficiency in Japanese language skills, a deep understanding of how cultural heritage shapes the people and society of modern Japan, and a keen sensitivity to intercultural differences.

The Japanese language program offers a broad variety of courses designed to prepare majors for a number of careers after graduation. A major in Japanese is also a good preparatory curriculum for graduate programs in such areas as international business, international law, public administration, linguistics, and journalism.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Impacted Program

The Japanese major is an impacted program. To be admitted to the Japanese major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Japanese Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 11081) (SIMS Code: 113902)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in Japanese courses can apply to the degree.

Students majoring in Japanese must complete a minor or a certificate in another field to be approved by the departmental adviser in Japanese.

All students with transfer credits must take a placement test at the Testing Services office at SDSU.

NOTE: Speakers of Japanese who have completed compulsory education through junior high school in Japan are not eligible to enroll in Japanese language courses or major in Japanese. These students will not receive credit for Japanese 311, 312, 321, 322, 411, $412,421,422$, and 480.

Preparation for the Major. Japanese 111, 112, 211, 212. (20 units)
Language Requirement. The language requirement is automatically fulfilled through coursework for preparation for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 24 upper division units in Japanese to include 12 units from Japanese 311, 312, 411, 412, and four courses selected from Japanese 321, 322, 421, 422, 480, or a Japan content course approved by the major adviser. No more than one upper division Japanese course taught in English may be applied to the major.

## Japanese Minor <br> (SIMS Code: 113901)

The minor in Japanese consists of a minimum of 15 units taught in Japanese, at least 12 units of which must be in upper division Japanese courses. Any course taught in English needs department approval to apply to the minor requirements.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Language Requirement for the

## B.A. Degree in Liberal Arts and Sciences

Students electing the study of Japanese to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Japanese 211 or the equivalent level of achievement. The usual sequence of coursework is Japanese 111, 112, and 211. Refer to section of catalog on "Graduation Requirements" for additional ways to satisfy competency.

## High School Equivalents

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:

1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

## Japanese Language Proficiency Test

The Japanese language proficiency test is taken to assess the proficiency level and to place students at the most appropriate level in the curriculum of the Japanese language program at San Diego State University. Students who have special backgrounds, and those SDSU students who took Japanese elsewhere, including SDSU students who participated in exchange programs, are required to meet with the program adviser and to take this examination.

Test dates and times are listed in the "Special Tests" section of the Class Schedule.

## Courses (JAPAN)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

Native speakers of Japanese or students whose placement test results demonstrate educated native or near-native fluency will not receive credit for taking lower division courses.

All lower division courses in Japanese are taught in Japanese.
No credit will be given for lower division courses taken after successfully completing any upper division Japanese course taught in Japanese.

No credit will be given for Japanese 111, 112, 211, 212 taken out of sequence.
JAPAN 111. Elementary Japanese I (5) [GE]
Five lectures and one hour of laboratory.
Elementary language skills: fundamental grammar, idiomatic expressions, hiragana, katakana, and basic kanji characters. Reading, writing, speaking, oral-aural drills, and relationship between language and culture.
JAPAN 112. Elementary Japanese II (5) [GE]
Five lectures and one hour of laboratory.
Prerequisite: Japanese 111.
Continuation of Japanese 111. Preparation for Japanese 211.
JAPAN 211. Intermediate Japanese $I$ (5) [GE]
Five lectures and one hour of laboratory.
Prerequisite: Japanese 112.
Continuation of Japanese 112. More kanji and grammar. Further development of language competence for advanced courses in Japanese. Preparation for Japanese 212.
JAPAN 212. Intermediate Japanese II (5) [GE]
Five lectures and one hour of laboratory.
Prerequisite: Japanese 211.
Strengthening communication skills in Japanese; various literary styles; additional kyoiku kanji. Cultural values shaping modern Japanese society; intercultural communication. Preparation for Japanese 311.

## JAPAN 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## JAPAN 299. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
All upper division courses in Japanese are taught in Japanese unless otherwise stated.
No credit will be given for Japanese 311, 312, 411, 412 taken out of sequence. Native speakers of Japanese or students whose placement test results demonstrate educated native or near-native fluency will not receive credit for Japanese 311, 312, 321, $322,411,412,421,422$, and 480.
JAPAN 311. Third Year Japanese I (3) [GE]
Three lectures and one hour of laboratory.
Prerequisite: Japanese 212.
Continuation of Japanese 212. Strengthening of communication skills in Japanese; various literary styles; cultural values shaping modern Japanese society; intercultural communication. Preparation for Japanese 312.
JAPAN 312. Third Year Japanese II (3) [GE]
Three lectures and one hour of laboratory.
Prerequisite: Japanese 311 or 321.
Further strengthening of communication skills in Japanese; various literary styles; introduction of chugaku kanji. Social and economic issues in Japan and the U.S.; cultural values shaping business conduct in Japan; characteristics of Japanese management; intercultural communication. Preparation for Japanese 411.

## JAPAN 321. Advanced Japanese Discourse (3) [GE]

Prerequisite: Japanese 212.
Development of advanced communication skills through Japanese media such as Japanese news broadcasts and television drama. Focus on listening comprehension.
JAPAN 322. Advanced Conversation Through Media (3) [GE]
Prerequisite: Japanese 311 or 321.
Development of advanced communication skills through Japanese media such as Japanese news broadcasts and television drama. Focus on oral communication.
JAPAN 332. Narratives of Japanese Popular Culture (3) [GE]
Prerequisite: Upper division standing.
Popular Japanese narrative traditions from 1600 to present in mainstream cultural products to include written and pictorial texts, performing arts, film, animation, and graphic novels. Class, gender, nationalism, and identity. Taught in English.
JAPAN 380. Japanese Culture (3) [GE]
(Same course as Humanities 380)
Significant works of literary, performing, and visual arts to include array of artistic trends, cultural phenomena, historical developments, and socio-political discourses throughout the nation's long and tumultuous history. Taught in English.
JAPAN 411. Fourth Year Japanese I (3)
Prerequisite: Japanese 312 or 322.
Continuation of Japanese 312. Further strengthening of communication skills in Japanese; various literary styles; more chugaku kanji. Social and economic issues in Japan and in the U.S.; cultural values shaping business conduct in Japan; characteristics of Japanese management; intercultural communication. Preparation for Japanese 412.

## JAPAN 412. Fourth Year Japanese II (3)

Prerequisite: Japanese 411 or 421.
Continuation of Japanese 411. Further strengthening of communication skills in Japanese; various literary styles; most joyo kanji. Social and economic issues in Japan and the U.S.; cultural values shaping business conduct in Japan; characteristics of Japanese management; intercultural communication.
JAPAN 421. Japanese Literature Through Text and Film (3)
Prerequisite: Japanese 312 or 322.
Japanese literature from earliest times to present. Major works of modern Japanese fiction as a literary genre and their cinematic interpretation.

## JAPAN 422. Newspaper Reading and Advanced

## Composition (3)

Prerequisite: Japanese 411 or 421.
Development of reading and writing skills through texts taken from current Japanese newspapers and broadcast news.
JAPAN 480. Business Japanese (3)
Prerequisite: Japanese 411 or 421.
Commercial Japanese, with emphasis on economic principles necessary for financial analysis and management, including banking system, foreign exchange market, stock market, and derivatives. Terminology and techniques used in Japanese commercial transaction. Japanese business rhetoric.

## JAPAN 495. Japanese Internship (1-3)

Prerequisites: Upper division standing in the major and approval of instructor.

Practical work experience in a field related to Japanese studies. Work done under joint direction of activity sponsor and instructor.

## JAPAN 496. Topics in Japanese Studies (1-4)

Topics in Japanese language, literature, culture and linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit eight units.
JAPAN 499. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

# Jewish Studies 

In the College of Arts and Letters

OFFICE: Arts and Letters 662A
TELEPHONE: 619-594-5327 / FAX: 619-594-8696
E-MAIL: jewishstudiesprogram@sdsu.edu
WEBSITE: http://jewishstudies.sdsu.edu

## Faculty

Jewish studies is administered by the Modern Jewish Studies Executive Board of San Diego State University. Faculty assigned to teach courses in modern Jewish studies are drawn from the Departments of English and Comparative Literature; European Studies; History; Linguistics and Asian/Middle Eastern Languages; and Religious Studies.
Director and Undergraduate Adviser: Risa Levitt (Religious Studies)

## Offered by Jewish Studies

Major in modern Jewish studies with the B.A. degree
in liberal arts and sciences.
Minor in Jewish studies.

## The Major

Modern Jewish studies is a multidisciplinary major which provides an understanding of Jewish civilizations as the result of the interactions of Jewish culture, history, politics, and religion with other civilizations in societies where Jews have been the dominant majority population (the first two Jewish commonwealths and the modern state of Israel) and in those of the diaspora Jewish communities where Jews have been a minority group.

Students will be expected to obtain proficiency in Hebrew. They will develop an understanding of the major events in Jewish history starting with the biblical period through the centuries of diaspora to the Holocaust and the creation of the modern state of Israel. Students will be exposed to main Jewish beliefs, ideas, and traditions which have arisen in these different historical contexts. They will also become familiar with Jewish visual and literary expressions of culture. It is hoped that the study of Jewish civilizations will foster an awareness of how the Jewish experience reflects the universal dynamic of how ethnic, religious, or racial minorities interact with majority societies (i.e., discrimination and persecution, acculturation, integration, syncretism, and resistance to assimilation).

Those completing the major will be prepared for careers or further graduate training in the foreign service, overseas business, education, social services, multi-media productions, visual and literary arts, advocacy organizations, museum work, and the ministry.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible. Students must receive major advising in the first semester they declare Modern Jewish Studies as their major and must do so no later than the first semester of their junior year.

## Impacted Program

The modern Jewish studies major is an impacted program. To be admitted to the modern Jewish studies major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Modern Jewish Studies Major

## With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 15102) (SIMS Code: 114102)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A minor is not required with this major.
Preparation for the Major. Jewish Studies 130 [or Humanities 130] and either Religious Studies 100 or 101 or 103. ( 6 units)

Language Requirement. Hebrew 101, 102, and 201.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 27 upper division units.

## History Area (12 units)

History 436. Modern Jewish History in Feature Films (3)
History 440. The Holocaust and Western Civilization (3)
History 474. The Middle East Since 1500 (3)
History 488. Modern Jewish History (3)
History 527. The Holocaust in Feature Films (3)
History 574. Arab-Israeli Relations, Past and Present (3)
Religion, Culture, and Thought Area (12 units)
English 526. Topics in Literature of the United States:
Jewish American Literature (3)
Religious Studies 301. Hebrew Bible (3)
Religious Studies 320. Judaism (3)
Religious Studies 330. Abrahamic Faiths: Shared Stories (3)
Religious Studies 373. Women and the Bible (3)
Religious Studies 405 [or Humanities 405]. Faith and Hope (3)
Religious Studies 581. Major Theme: Jewish and Christian Origins (3)
Russian 435. Russian and East European Jewish Culture (3)

## Electives (3 units)

Jewish Studies 495. Jewish Studies Internship (3) Cr/NC
Jewish Studies 496. Topics in Jewish Studies (1-3) (May be repeated with new content)
Hebrew 496. Topics in Hebraic Studies (1-4) (May be repeated with new content) (Maximum credit eight units)
Hebrew 499. Special Study (1-3) (Maximum credit six units)
A maximum of six units outside of Jewish Studies may be counted toward the major with the approval of the adviser. Students may not double count courses taken for the required and core areas for elective use and vice versa.

## Jewish Studies Minor

## (SIMS Code: 114103)

Dr. Risa Levitt, Department of Religious Studies, is adviser for this minor.

The Jewish studies minor provides a balanced interdisciplinary study of Jewish contributions to world culture and history. It serves the needs of students who plan to (1) specialize in disciplines in which an understanding of Jewish contributions is essential, or (2) follow careers in teaching, community service, foreign service, or the ministry. Students seeking a minor in Jewish studies may want to consider combining it with a major in Islamic and Arabic Studies. Many courses relevant to this major are available in anthropology, economics, geography, history, political science, and sociology.

The minor consists of a minimum of 19 units to include seven to eight units selected from Jewish Studies 130 [or Humanities 130] or Religious Studies 100, 101, or 103; and Hebrew 101, 102, or 201; and 12 upper division units selected from Jewish Studies 495, 496; Hebrew 496; History 436, 440, 488, 527, 574; Religious Studies $301,320,330,581$; and other relevant courses may be counted as part of the 12 upper division units taken with the approval of the adviser for Jewish Studies.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Courses (JS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

## JS 130. The Jewish Heritage (3) [GE]

(Same course as Humanities 130)
Hebraic and Jewish influences on the arts, literature, philosophy, and religion of Western civilization.

## JS 296. Topics in Jewish Studies (1-3)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)

## JS 495. Jewish Studies Internship (3) Cr/NC

Six hours per week at agency and one hour every other week with SDSU supervising faculty member.
Prerequisites: Upper division status and consent of supervising instructor.

Internship with local Jewish service agencies and non-profit organizations. Work to be done under direction of activity supervisor and SDSU instructor. Written project report and internship conferences required every other week with SDSU faculty adviser. Maximum credit six units.

## JS 496. Topics in Jewish Studies (1-3)

Prerequisite: Upper division status.
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

# Journalism and Media Studies 

OFFICE: Adams Humanities 4196*
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E-MAIL:jmsdesk@sdsu.edu
WEBSITE: http://jms.sdsu.edu
The advertising, journalism, and public relations programs are accredited by the Accrediting Council on Education in Journalism and Mass Communications (ACEJMC).
*Office locations are subject to change due to construction. Check the
website at http://psfa.sdsu.edu for current office locations.

## Faculty

Emeritus: Barker, Borden, Brown, Buckalew, Davis, Dozier, Eadie, Hartung, Martin, McBride, Odendahl, Spevak, Wulfemeyer
Director: Arceneaux (Interim)
The Lionel Van Deerlin Professor of Communication and Public Policy: Eger
Professors: Arceneaux, Mueller, Shen, Sweetser
Associate Professors: Nee, Schmitz Weiss, Santana, Zhong
Assistant Professors: Feng, Rodriguez, Thelen
Lecturers: Cicalo, Coddon, Kruming, Littlefield

## Offered by the School

Master of Arts degree in communication with specialization in: Mass communication and media studies.
Major in journalism with the B.A. degree
in liberal arts and sciences.
Emphasis in advertising.
Emphasis in media studies.
Emphasis in public relations.
Minor in digital and social media studies.
Certificate in international media.

## The Lionel Van Deerlin Professor of Communication and Public Policy

More than 40 major communications companies contributed to establish The Lionel Van Deerlin Professor of Communication and Public Policy. The professorship serves as the center for the study of public policy and issues affecting the communications/ information field, about which Lionel Van Deerlin was vitally concerned during his 18 years in Congress. The current holder of the professorship is John M. Eger.

## General Information

The School of Journalism and Media Studies envisions a global society where citizens are engaged in their communities; where media professionals are ethical and committed to diversity and inclusivity, and embrace technology to serve the public good; and where people from all backgrounds think critically about the media. The school's curricula reflect these very important themes. Students are required to take a set of core classes in digital and social media, ethics and law, and research methods for professional communicators. They also complement their in-class work with internships and service-learning projects in the community. Programs within the school prepare students for careers in advertising, journalism, public relations, and other media industries, as well as for jobs in a technologically driven workforce landscape whose future media forms cannot be predicted. The School of Journalism and Media Studies also prepares students to enter careers as analysts, producers, and editors of media content in government and private industry, as well as for graduate education in a variety of disciplines.

## Impacted Programs

Programs in the School of Journalism and Media Studies are impacted. Students must enter the university under the designated major code for the selected program. To be admitted to the selected program, refer to the program description for specific impaction criteria.

## Journalism and Media Studies Assessment

All students majoring in advertising, journalism, media studies, and public relations must complete a degree learning outcomes assessment in their first semester of enrolling in Journalism and Media Studies courses and during their final semester prior to graduation. See the School of Journalism and Media Studies advising office for more information.

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education courses will also fulfill a major preparation course requirement.

## Journalism Major

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 06021) (SIMS Code: 664101)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

Journalism education emphasizes the training of writers, reporters, and editors for the mass media. It also seeks to prepare and guide students interested in pursuing careers in a wide range of informational and interpretive multimedia environments, including in digital and social media. The courses offered in the journalism major are designed to give students a working knowledge of the skills, concepts, values, and ethics needed to succeed as professional communicators. Courses focus on the basic elements of factual and analytical writing, editing, producing, designing, history, communication law and theory, and social responsibility of the mass media.
Career opportunities for journalism graduates are diverse, including book editing and publishing, freelance writing, industrial journalism, magazines, communication research, news agencies, newspapers, radio, television, teaching, and digital and social media.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment). No more than 48 units in journalism and media studies courses can apply to the B.A. degree in Liberal Arts and Sciences. Lower division activity/production courses in newspaper, magazine, yearbook, or broadcasting may not be applied toward the B.A. in journalism.

Accreditation standards require that all advertising, journalism, media studies, and public relations majors at SDSU complete at least 72 units of coursework outside the major and meet the liberal arts and sciences general education requirements of SDSU. Students must follow their major requirements and complete 15 additional units within an Auxiliary Discipline (within one academic unit outside journalism and media studies).

Impacted Program. The journalism major is designated as an impacted program. To be admitted to the journalism major, students must meet the following criteria:
a. Complete with a minimum grade point average of 3.0 and a grade of C (2.0) or better: Journalism and Media Studies 200, 210, 220; Economics 101. These courses cannot be taken for credit/no credit (Cr/NC);
b. Achieve a passing score on the Grammar, Spelling and Punctuation test by the third attempt;
c. Complete a minimum of 45 baccalaureate level semester units. A maximum of 90 semester units is recommended. (A minimum of 60 units is required for all transfer applicants.);
d. Have a cumulative grade point average of 3.0 or better.

Applicants not meeting the above minimum requirements may petition for admission to the journalism major. See the School of Journalism and Media Studies advising office for further information.

Preparation for the Major. Journalism and Media Studies 200, 210, 220; Economics 101. Some of these courses may also be used to fulfill lower division general education requirements. (12 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a minimum GPA of 3.0 and a grade of $C$ (2.0) or better in each class.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to the section of this catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above before taking Journalism and Media Studies 310W and earn a grade of $C(2.0)$ or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Journalism and Media Studies 300, 310W, 315, 420, 430, 489, 494, 550; six units selected from Journalism and Media Studies 425, 434, $435,441,445,490,495$; and six units of upper division coursework in either journalism and media studies or learning design and technology.

Auxiliary Discipline. Students selecting the journalism major are required to complete 15 additional units, six units of which must be at the upper division level, within one academic unit outside journalism and media studies. Completion of a minor or a second major will satisfy the Auxiliary Discipline requirement.

## Emphasis in Advertising

## (Major Code: 06041) (SIMS Code: 661108)

Students in the advertising emphasis learn to understand the basic principles and theories of advertising; write copy and design messages for distribution through multiple media channels; apply appropriate research methods to plan, monitor, and evaluate advertising; develop strategic thinking skills applied to targeting audiences; create and implement advertising campaigns that are responsible to both consumers' as well as corporate needs; critically analyze issues related to advertising; communicate effectively with diverse audiences; and practice ethical communication.

Advertising graduates are employed in advertising agencies and marketing departments in the areas of media ad sales, sales promotions, research, creative development, account services, sales management, and digital and social media.

To complete the advertising emphasis, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Accreditation standards require that all advertising, journalism, media studies, and public relations majors at SDSU complete at least 72 units of coursework outside the major and meet the liberal arts and sciences general education requirements of SDSU. Students must follow their major requirements and complete 15 additional units within an Auxiliary Discipline (within one academic unit outside journalism and media studies).

Impacted Program. The advertising emphasis is designated as an impacted program. To be admitted to the advertising emphasis, students must meet the following criteria:
a. Complete with a minimum grade point average of 3.0 and a grade of C (2.0) or better: Journalism and Media Studies 200, 210, 220; Economics 101. These courses cannot be taken for credit/no credit (Cr/NC);
b. Achieve a passing score on the Grammar, Spelling and Punctuation test by the third attempt;
c. Complete a minimum of 45 baccalaureate level semester units. A maximum of 90 semester units is recommended. (A minimum of 60 units is required for all transfer applicants.);
d. Have a cumulative grade point average of 3.0 or better.

Applicants not meeting the above minimum requirements may petition for admission to the advertising emphasis. See the School of Journalism and Media Studies advising office for further information.

Preparation for the Major. Journalism and Media Studies 200, 210, 220; Economics 101. Some of these courses may also be used to fulfill lower division general education requirements. (12 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a minimum GPA of 3.0 and a grade of $C$ (2.0) or better in each class.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to the section of this catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above before taking Journalism and Media Studies 310W and earn a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Journalism and Media Studies 310W, 460, 462, 494, 560, 562, 565; three units selected from Journalism and Media Studies 300, 440, 480; and 12 units of upper division coursework in journalism and media studies (three units may be selected from learning design and technology).

Auxiliary Discipline. Students selecting the advertising emphasis are required to complete 15 additional units, six units of which must be at the upper division level, within one academic unit outside journalism and media studies. Completion of a minor or a second major will satisfy the Auxiliary Discipline requirement.

## Emphasis in Media Studies

## (Major Code: 06021) (SIMS Code: 661110)

The emphasis in media studies prepares students for the ever-changing, globalized world of the 21 st century and the many new opportunities that communication technology makes possible. Classes emphasize both conceptual and practical knowledge and explore the wide range of phenomena that constitute media in the 21st century. Specific courses focus on digital media analytics, social media leadership, media innovation, and fundamentals of multi-media development. Students have the flexibility to focus on particular areas of interest.

The emphasis in media studies also prepares students for a range of careers, including media analyst, social media community leader, entrepreneur, and online content manager. Given the rapidly changing nature of technology, media studies graduates will also invent new career paths for themselves as media industries evolve.

To complete the media studies emphasis, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Accreditation standards require that all advertising, journalism, media studies, and public relations majors at SDSU complete at least 72 units of coursework outside the major and meet the liberal arts and sciences general education requirements of SDSU. Students must follow their major requirements and complete 15 additional units within an Auxiliary Discipline (within one academic unit outside journalism and media studies).

Impacted Program. The media studies emphasis is an impacted program. To be admitted to the media studies emphasis, students must meet the following criteria:
a. Complete with a minimum grade point average of 3.0 and a grade of C (2.0) or better: Journalism and Media Studies 200, 210, 220; Economics 101. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Achieve a passing score on the Grammar, Spelling and Punctuation test by the third attempt;
c. Complete a minimum of 45 baccalaureate level semester units. A maximum of 90 semester units is recommended. (A minimum of 60 units is required for all transfer applicants.);
d. Have a cumulative grade point average of 3.0 or better.

Applicants not meeting the above minimum requirements may petition for admission to the media studies emphasis. See the School of Journalism and Media Studies advising office for further information.

Preparation for the Major. Journalism and Media Studies 200, 210, 220; Economics 101. Some of these courses may also be used to fulfill lower division general education requirements. (12 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a minimum grade point average of 3.0 and a grade of $C(2.0)$ or better in each class.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to the section of this catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completion of an approved upper division writing course with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 33 upper division units to include Journalism and Media Studies 315, 408, 472, 489, 492, 494; three units selected from Journalism and Media Studies 418, 428, Learning Design and Technology 410, 432; 12 units of upper division coursework open to media studies students in either journalism and media studies or learning design and technology.

Auxiliary Discipline. Students selecting the media studies emphasis are required to complete 15 additional units, six units of which must be at the upper division level, within one academic unit outside journalism and media studies. Completion of a minor or a second major will satisfy the Auxiliary Discipline requirement.

## Emphasis in Public Relations

## (Major Code: 05992) (SIMS Code: 661109)

Public relations students learn the theories and skills necessary to help them execute each stage of the strategic planning process. Specifically, students learn mass communication and public relations theories and principles; research methods; journalistic writing; public relations techniques and tactics; and strategic planning. A selective internship program also gives students the opportunity to try out their skills in the workplace, under the supervision of faculty and on-the-job mentors.

Public relations graduates work as media relations specialists and strategic planners in public relations departments and firms, as internal and external communication specialists in corporations, as public information specialists in government agencies and the military, and in fundraising and membership development for not-for-profit organizations.

To complete the public relations emphasis, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Accreditation standards require that all advertising, journalism, media studies, and public relations majors at SDSU complete at least 72 units of coursework outside the major and meet the liberal arts and sciences general education requirements of SDSU. Students must follow their major requirements and complete 15 additional units within an Auxiliary Discipline (within one academic unit outside journalism and media studies).

Impacted Program. The public relations emphasis is designated as an impacted program. To be admitted to the public relations emphasis, students must meet the following criteria:
a. Complete with a minimum grade point average of 3.0 and a grade of C (2.0) or better: Journalism and Media Studies 200, 210, 220; Economics 101. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Achieve a passing score on the Grammar, Spelling and Punctuation test by the third attempt;
c. Complete a minimum of 45 baccalaureate level semester units. A maximum of 90 semester units is recommended. (A minimum of 60 units is required for all transfer applicants.);
d. Have a cumulative grade point average of 3.0 or better.

Applicants not meeting the above minimum requirements may petition for admission to the public relations emphasis. See the School of Journalism and Media Studies advising office for further information.

Preparation for the Major. Journalism and Media Studies 200, 210, 220; Economics 101. Some of these courses may also be used to fulfill lower division general education requirements. (12 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a minimum GPA of 3.0 and a grade of $C(2.0)$ or better in each class.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to the section of this catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above before taking Journalism and Media Studies 310W and earn a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Journalism and Media Studies 310W, 480, 481, 489, 494, 581, 585; three units selected from Journalism and Media Studies 300, 440, 460; and 12 units of upper division coursework in either journalism and media studies or learning design and technology.

Auxiliary Discipline. Students selecting the public relations emphasis are required to complete 15 additional units, six units of which must be at the upper division level, within one academic unit outside journalism and media studies. Completion of a minor or a second major will satisfy the Auxiliary Discipline requirement.

## Digital and Social Media Studies Minor

(Minor Code: 15060) (SIMS Code: 661117)
The minor in digital and social media studies consists of 18 units to include Journalism and Media Studies 200, 210, 494, and nine units selected from Journalism and Media Studies 300, 408, $440,460,462,480,489$, or Learning Design and Technology 410. Admission to the minor requires a minimum cumulative GPA of 2.0 and completion of Journalism and Media Studies 200 and 210 with grades of $C$ (2.0) or better in each course.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed at San Diego State University.

## International Media Certificate

## (SIMS Code: 661131)

The basic certificate in international media offers a theoretical grounding in media and in a specific, applied media field, as well as enhancing foundational knowledge with courses on global aspects of media use, media technologies, and media industries. Students take a course in contemporary media or in social media in the digital age, then augment foundational coursework with a course in advertising, journalism, media studies, or public relations. Students also apply theoretical knowledge to specific, global media contexts.

The certificate program is open to students enrolled at San Diego State University or through SDSU Global Campus, excluding major and minor students in the School of Journalism and Media Studies.

Students will enhance major area studies with an understanding of international media. International students studying advertising, journalism, media, or public relations at their home universities augment their knowledge with international aspects of media. The certificate is appropriate for Open University students in international media as a career-enhancement option or as an academic foundation. For more information, contact the School of Journalism and Media Studies.

The certificate requires 12 units to include Journalism and Media Studies 200 or 210; three units selected from Journalism and Media Studies 300, 408, 460 or 480 ; and six units selected from Journalism and Media Studies 450, 506, 574, 591, Television, Film and New Media 363.

All courses in the certificate program must be completed with a grade point average of 2.0.

## Courses (JMS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

JMS 200. Introduction to Contemporary Media (3) [GE]
Mass media and emerging forms of niche media in the global community. Theories, structures, functions, practices, problems, interrelationships, economics, critical analyses, history, and ethics.
JMS 210. Social Media in the Digital Age (3) [GE]
Two lectures and one hour of discussion.
Digital media literacy, digital resilience, social networking, and virtual worlds. Evaluating information via digital, mobile, and social technologies in a global environment. Social media's impact on lifelong familial, personal, professional, and social relationships; mental and physical health, and personal identity.

## JMS 220. Writing for the Mass Media (3)

Two lectures and two hours of activity.
Prerequisites: Sophomore standing; ability to type; premajor in advertising, journalism, media studies, public relations; or premajor or major in art with an emphasis in multimedia. Proof of completion of prerequisites required: Copy of transcript.

Introduction to writing techniques for mass media. Laboratory practice in informational and persuasive writing, evaluation, and judgment. In some semesters, specially designated sections require bilingual fluency in English and Spanish, to be determined by a stamp of Spanish/English biliteracy on high school transcript, or a score of 5 on AP Spanish test, or passing the SDSU Spanish Language Proficiency Test. See footnotes in Class Schedule.

## JMS 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)

## JMS 300. Principles of Journalism (3)

Prerequisites: Completion of 45 baccalaureate level semester units.

Theory and practice of journalism, survey of history, ethics, law, international news systems, and social responsibility of the press. Operations of newspapers, news magazines, radio and television news departments, and other news agencies. Impact of new media and technology on journalism, economics, and management of news organizations.

## JMS 309. Workshop (1-3) Cr/NC

Prerequisite: Consent of instructor.
Practical experience in an area of study within the School of Journalism and Media Studies. Maximum credit three units.

## JMS 310W. Media Writing and Reporting (3)

Two lectures and two hours of activity.
Prerequisites: Journalism and Media Studies 220 with a grade of C (2.0) or better. Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a grade of C (2.0) or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Copy of transcript. Admission to majors in advertising, journalism, and public relations.

Writing for advertising, journalism, and public relations products in various media platforms. Gathering information, interviewing, conducting observations, and using online database. Laboratory and field work.

## JMS 312W. Media Writing for Scientists (3)

Two lectures and two hours of activity.
Prerequisites: Journalism and Media Studies 200 or 210. Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or better (or earned a grade of C (2.0) or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Writing science research for general audiences. Finding news angles, gathering information, and interviewing scientists. Writing with accessibility, accuracy, and creativity across digital, mass, niche, and social media platforms.

## JMS 315. Digital Media Principles and Design (3)

Prerequisites: Upper division standing and admission to a major in the School of Journalism and Media Studies.

Preparing and editing content for multimedia, web, and mobile platforms in journalism and other media professions. Digital media layout and design; usability, accessibility, segmentation, and scanability.

## JMS 408. Principles of Media Studies (3)

Prerequisites: Completion of 45 baccalaureate level semester units.

Media theories, models, and research exploring media effects, and audience uses of media.
JMS 410. Media and Sexuality (3)
Prerequisite: Admission to a major in the School of Journalism and Media Studies. Proof of completion of prerequisite required: Copy of transcript.

Sexuality and sex-related issues in mass mediated news, entertainment, and advertising content. Sexuality in media and its effects on interpersonal relations, sexual identity, sexual politics, social discourse, and public policy. Portrayals of conventional sexuality and of sexual minorities.

## JMS 412. Media Industries and Their Audiences (3)

Prerequisite: Upper division standing.
Methods used by media industries to determine size and demographics of audience. Theories and models that explain audience behavior. Individual and group-action effects on media institutions and content.

## JMS 415. Radio in the Digital Era (3)

Prerequisites: Upper division standing and Journalism and Media Studies 210 with a grade of C (2.0) or better.

Programming and promotional strategies for contemporary radio. Technological evolution of radio over the past century to include digital media and podcasting. Business models and regulations for online, satellite, and terrestrial radio. Basic audio production and techniques.

## JMS 416. Media and Sports (3)

Prerequisites: Upper division standing and Journalism and Media Studies 200 or 210.

Relationships among media industries, professional sports and social issues to include gender, national identity, race, and sexuality. Impact of digital and social media on fans, management, and players. Influence of media coverage upon evolution of sports.

## JMS 418. Social Media Community Leadership (3)

Two lectures and one hour of discussion.
Prerequisites: Journalism and Media Studies 210 with a grade of C (2.0) or better. Admission to a major in the School of Journalism and Media Studies.

Leadership in an online community environment. Developing effective strategies to cultivate and moderate communities of practice using digital technologies and social media platforms. Principles of social media engagement and effectiveness as applied to online communities. Writing and creating content to encourage participation and interaction.

## JMS 420. Public Affairs News Reporting (3)

One lecture and four hours of activity.
Prerequisites: Journalism and Media Studies 300, 310W, and 315 with a grade of C (2.0) or better in each course. Admission to journalism major. Proof of completion of prerequisites required: Copy of transcript.

Field and laboratory practice in news gathering and writing, covering news beats including courts, local governments, and other news sources. Emphasis on accuracy, clarity, comprehensiveness and interpretation.

## JMS 424. Media in Latin America (3)

Prerequisite: Upper division standing.
Media development, media-state relationships, and role of media in democratic societies and common patterns in Latin American media ownership. Societal and international forces and patterns that appear, change, and persevere.
JMS 425. Writing Opinion, Reviews, and Criticism (3)
Two lectures and two hours of activity.
Prerequisites: Journalism and Media Studies 300, 310W with a grade of C (2.0) or better in each course. Admission to journalism major. Proof of completion of prerequisites required: Copy of transcript.

Principles and practices of writing editorials and opinion essays for media outlets (print, broadcast, and online) to include writing reviews of theatre, music, books, and film.
JMS 428. Digital and Social Media Analytics (3)
Prerequisites: Journalism and Media Studies 210, and 489 or 560 with a grade of $C(2.0)$ or better in each course.

Measurement standards, principles, and outcomes of digital and social media. Digital data collection methods, data analysis metrics, data reporting, presentation tools. Using analytics to enhance organizational effectiveness.

## JMS 430. Digital Journalism (3)

Prerequisites: Journalism and Media Studies 300, 310W, and 315 with a grade of C (2.0) or better in each course. Admission to journalism major. Proof of completion of prerequisites required: Copy of transcript.

Using digital and mobile platforms to publish news content and how to use such platforms for news reporting and gathering purposes. Data-driven journalism, online writing styles, web programming, social media strategies, and digital design principles.
JMS 434. Writing for Spanish-Language and Latino Media (3)
Two lectures and two hours of activity.
Prerequisites: Journalism and Media Studies 220 with a grade of $C$ (2.0) or better. Admission to a major in the School of Journalism and Media Studies. For other majors, consent of instructor is required. Students must be able to read, speak, and write in English and Spanish. See instructor to determine appropriate level of required fluency.

Writing techniques for Spanish-language and Latino media in the United States and globally. Cultures, languages, and traditions of Spanish-language and Latino media used for advertising, journalism, public relations, and other professional media fields.

## JMS 435. Photojournalism (3)

Two lectures and two hours of activity.
Prerequisites: Journalism and Media Studies 220 with a grade of C (2.0) or better. Admission to a major in the School of Journalism and Media Studies; or premajor or major in art with an emphasis in multimedia. Completion of the Graduation Writing Assessment Requirement or eligibility to register in an upper division writing course.

Creating, curating, and editing photographs for use in news stories. Professional practices and ethical principles of photojournalism. Use of visual elements to report the news.
JMS 440. Management of Media Organizations (3)
Prerequisite: Upper division standing. Proof of completion of prerequisite required: Copy of transcript.

Revenue generation, marketing, distribution, production, personnel, social responsibilities, and current developments in media organizations. Planning, organizing, implementing organizational plans.

JMS 441. Magazine and Feature Writing (3)
Two lectures and two hours of activity.
Prerequisites: Journalism and Media Studies 300, 310W with a grade of C (2.0) or better in each course. Proof of completion of prerequisites required: Copy of transcript.

Planning, gathering material, writing and marketing articles for specialized and general publications. Production of expository articles and marketing of at least one article.
JMS 445. Television News Reporting and Producing (3)
One lecture and four hours of activity.
Prerequisites: Journalism and Media Studies 300, 310W, and 315 with a grade of $C(2.0)$ or better in each course. Admission to journalism major. Proof of completion of prerequisites required: Copy of transcript.

Electronic news, focusing on reporting and producing newscasts. Shooting, writing, editing, and presenting news. Roles and responsibilities in electronic newsrooms to include role of producer.

## JMS 450. Media and Culture (3)

Prerequisites: Journalism and Media Studies 489 or 560 with a grade of C (2.0) or better. Admission to a major in the School of Journalism and Media Studies.

Cultural phenomena through media products to include films, television programs, print media. Appreciation of various cultures and practices through analysis of media products.
JMS 452. Media and Identity (3)
Prerequisites: Upper division standing and Journalism and Media Studies 200 or 210.

Disability, ethnicity, gender, race, sexual orientation, and other identity markers in various facets of mass and social media to include audience reception, employment, niche marketing, ownership/control, and production. Historical and contemporary issues of representation and identity formation and maintenance.

## JMS 454. Media and Brazil (3)

Prerequisite: Upper division standing.
Media industries and professions in Brazil. Digital and social media impacts on Luso-Brazilian cultures and portrayals of those cultures in domestic and global media. Theories of media adoption, diffusion, effects, and systems. Taught in English.

## JMS 460. Principles of Advertising (3)

Prerequisites: Completion of 45 baccalaureate level semester units.

Advertising practices. Historical perspectives, changing role of advertising, shift from impression to engagement and from traditional to emerging media, evolving agency structure, audience targeting, creative strategy, regulation, social responsibility and ethics, globalization, and current trends and developments.
JMS 462. Advertising Strategy and Social Media (3)
Prerequisite: Upper division standing.
Developments and emerging trends in use of social media for company and brand promotion. Case studies. Strategic planning options for current and emerging social media environments. Segmentation and approaches for community engagement. Metrics and evaluation.

## JMS 472. Media Technology and Society (3)

Two lectures and one hour of discussion.
Prerequisites: Journalism and Media Studies 315, 408, and 489. Admission to media studies emphasis, Major Code: 06021. An approved upper division writing course with a grade of $C$ (2.0) or better or passing the Writing Placement Assessment with a score of 10 .

Relationship between technology and society, and factors that influence the innovation, development, commercialization, and diffusion of media technologies. Exploration of specific qualities of various media forms.

## JMS 480. Principles of Public Relations (3)

Prerequisites: Completion of 45 baccalaureate level semester units.

Concepts, history, theory, social responsibility, ethics, and management of public relations. Public relations strategic planning process. Survey of problems and practices in corporations, government and politics, health care, education, associations, and not-for-profit organizations.

JMS 481. Public Relations Media and Messaging (3)
One lecture and four hours of activity.
Prerequisites: Journalism and Media Studies 310W and 480 with a grade of $C$ (2.0) or better in each course. Admission to public relations emphasis, Major Code: 05992. Proof of completion of prerequisites required: Copy of transcript.

Practical applications of public relations techniques with emphasis on writing, messaging, and selecting media channels. Production of materials for all forms of media. Special events, crisis management, and strategic planning. Field and laboratory practice.

## JMS 482A. Fashion Public Relations (1)

Prerequisites: Credit or concurrent registration in Journalism and Media Studies 480.

Strategic planning processes applied to problems and opportunities in the fashion industry. Insights from industry insiders. Case study and hands-on work for national clients.

## JMS 489. Research Methods in Mediated Communication (3)

Prerequisites: Upper division standing and Journalism and Media Studies 200 with a grade of C (2.0) or better. Proof of completion of prerequisites required: Copy of transcript.

Understanding and critically analyzing media reports of public opinion polls and other scientific research. Sampling and inferences to populations. Basic design and measurement issues. Margin of error. Levels of measure.

## JMS 490. Internship (1-3) Cr/NC

Prerequisites: Journalism and Media Studies 420, 472, 481, or 562 with a grade of $C$ (2.0) or better.

Supervised work at organizations engaged in media-related professional activities under combined direction of practitioners and professors. Maximum credit three units. Not open to students who have previously received three units of credit in Journalism and Media Studies 490A, 490B, 490C.

## JMS 492. Creative Uses of Emerging Media (3)

Two lectures and one hour of discussion.
Prerequisites: Journalism and Media Studies 472, 494, and either Journalism and Media Studies 418, 428, Learning Design and Technology 410 , or 432 with a grade of $C$ (2.0) or better in each course. Proof of completion of prerequisites required: Copy of transcript.

New and often unexpected convergence of media institutions, technology, and content. New economic and social alliances, entrepreneurial opportunities, uses, and effects. Capstone course for media studies majors. Completion of course with a grade of C (2.0) or better required for majors.

## JMS 494. Media Law and Ethics (3)

Prerequisites: Upper division standing and Journalism and Media Studies 200 with a grade of $C$ (2.0) or better. Proof of completion of prerequisites required: Copy of transcript.

Importance of freedom of expression. Legal issues and responsibilities of print, broadcast, and online media, and applications to advertising, journalism, and public relations. Ethical dilemmas encountered by media professionals and communication specialists, including challenges posed by global technologies.
JMS 495. Advanced Topics in Media Writing and Skills (3)
One lecture and four hours of activity.
Prerequisite: Journalism and Media Studies 310W with a grade of $C(2.0)$ or better. Proof of completion of prerequisite required: Copy of transcript.

Specialized topics in media writing and skills. May be repeated with new content. Maximum credit six units.
JMS 496. Experimental Topics (1-3)
Prerequisites: Upper division standing and consent of instructor. Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## JMS 499. Special Study (1-3)

Prerequisites: Upper division standing and consent of instructor. Individual study or project, normally in a research area selected by the student. Maximum credit three units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)

## JMS 506. Advertising and Society (3)

Prerequisite: Admission to a major in the School of Journalism and Media Studies. Proof of completion of prerequisite required: Copy of transcript.

Theoretical and philosophical analysis of advertising in modern society.
JMS 515. Media Entrepreneurship and Intrapreneurship (3)
Prerequisite: Journalism and Media Studies 300, 408, 460, 480, or graduate standing.

Models of media creation, innovation, ownership, and sustainability in the digital age. Critical thinking and problem solving skills required for designing, producing, and implementing an entrepreneurial or intrapreneurial project in a media industry.

## JMS 525. News and Social Media (3)

Prerequisites: Journalism and Media Studies 210 with a grade of $C$ (2.0) or better and upper division or graduate standing.

Culture of connectivity and ecosystem of digital journalism. Best practices with news reporting using digital media tools. Journalistic practices and mass communication theory.

## JMS 527. Advanced Topics in Journalism (3)

Prerequisites: Journalism and Media Studies 300 with a grade of C (2.0) or better. Admission to journalism major.

Reading, investigation, and research in a specialized topic in journalism. May be repeated with new content. Maximum credit six units.

## JMS 550. Multimedia News Laboratory (3)

One lecture and four hours of activity.
Prerequisites: Journalism and Media Studies 420, 430, 494 with a grade of $C(2.0)$ or better in each course. Proof of completion of prerequisites required: Copy of transcript.

Capstone course using skills and knowledge acquired in critical thinking, writing, reporting, editing, production, and design courses. Preparation of multimedia news content. Field and laboratory experience. Completion of course with a grade of $C$ (2.0) or better is required for majors.
JMS 552. Media in Country/Region $X$ (3)
Prerequisite: Journalism and Media Studies 200, 210, or graduate standing.

Media's impact on arts, business, government, law, and sports in country/region X . Similarities and differences of traditional and social media in country/region $X$ compared to the United States. Guest speakers, lectures, and visits to media organizations in country/region X. See Class Schedule for specific content.

## JMS 560. Advertising Research (3)

Prerequisites: Journalism and Media Studies 310W, 460, 462 with a grade of $C(2.0)$ or better in each course. Admission to advertising emphasis, Major Code: 06041. Proof of completion of prerequisites required: Copy of transcript.

Planning, evaluation, analysis of qualitative and quantitative research across traditional, digital, and social platforms. Ethics, sampling, experimentation, data analysis, segmentation, brand mapping, advertising testing and optimization, social media metrics.

## JMS 562. Advertising Creative (3)

One lecture and four hours of activity.
Prerequisites: Journalism and Media Studies 310W, 460, 462 with a grade of $C(2.0)$ or better in each course. Admission to advertising emphasis, Major Code: 06041. Proof of completion of prerequisites required: Copy of transcript.

Advertising, applying consumer insights, developing creative strategies, drafting creative briefs. Writing and design of advertising for traditional, digital, social, emerging media platforms. Multimedia laboratory experience.

## JMS 565. Advertising Campaigns (3)

Prerequisites: Journalism and Media Studies 494, 560, 562 with a grade of $C$ (2.0) or better in each course.

Branding campaigns using traditional, digital, and social media. Strategy for owned, earned, and paid media. Consumer analysis, community definition. Creative development. Media strategy and tactics. Campaign measurement. Completion of course with a grade of $C$ (2.0) or better is required for majors.

## JMS 566. Advertising Strategy and Digital Analytics

 Platforms (3)Prerequisites: Journalism and Media Studies 460 or 480 , and Journalism and Media Studies 560 or 581.

Strategy creation, implementation, and evaluation using digital analytics platforms. Digital analytics administration, monitoring, analysis, and reporting. Application of digital analytics to consumer advertising optimization.

## JMS 567. Advanced Topics in Advertising (3)

Prerequisites: Journalism and Media Studies 460 with a grade of C (2.0) or better. Admission to advertising emphasis, Major Code: 06041.

Reading, investigation, and research in a specialized topic in advertising. May be repeated with new content. Maximum credit six units.
JMS 574. International Advertising (3)
Prerequisite: Admission to a major in the School of Journalism and Media Studies.

Comparative cultural, economic, legal, political, and social conditions relevant to international advertising.
JMS 581. Applied Research in Public Relations (3)
Two lectures and two hours of activity.
Prerequisites: Journalism and Media Studies 310W, 480, 489 with a grade of $C$ (2.0) or better in each course. Admission to public relations emphasis, Major Code: 05992. Proof of completion of prerequisites required: Copy of transcript.

Qualitative and quantitative methods used in research to plan, track, evaluate public relations and communication practices. Computerized statistical analysis.

## JMS 582. Seminar in Media and Politics (3)

Prerequisites: Upper division or graduate standing and Journalism and Media Studies 489 or 560 or credit or concurrent registration in Journalism and Media Studies 600B.

Mass media on domestic, global politics, elections. Theories, concepts, history of media and politics. Impact of digital and social media on political process.
JMS 585. Professional Practices in Public Relations (3)
Prerequisites: Journalism and Media Studies 481, 494, 581 with a grade of $C(2.0)$ or better in each course.

Cases in public relations management. Theory and practice of issues management. Integration of public relations function in strategic management of corporate, governmental, nonprofit, social, and cultural organizations. Completion of course with a grade of $C$ (2.0) or better is required for majors.

JMS 590. Seminar in Crisis Communication in PR
Management (3)
Prerequisite: Upper division or graduate standing.
Theory, research, practice of crisis communication in public relations; development of crisis management plans; critical examination of classic/contemporary crisis management cases, both domestic and international.
JMS 591. Global Technology: Creativity and Innovation in the Digital Age (3)
Prerequisite: Upper division or graduate standing.
Economic, social, and political shifts in the global economy as a result of digital communication. Emergence of new national and international media policies to stimulate creativity and innovation as central factors in development.
JMS 593. Digital Media and Public Policy (3)
Prerequisite: Journalism and Media Studies 210 or graduate standing.

Federal, international, local law, and policy that shape the development, operations, structure of corporate offerings, digital media, and personal uses. History and philosophy of digital media regulation. Future trends in digital media.

## JMS 595. Seminar in Theoretical Approaches to Public Relations (3)

Prerequisite: Journalism and Media Studies 585 with a grade of $C$ (2.0) or better, or graduate standing.

Diverse theoretical approaches to public relations, including management, rhetorical, critical, relational and marketing approaches. Preparation for independent scholarly research project or master's thesis.

## JMS 596. Selected Topics (1-3)

Prerequisite: Senior standing or above.
Specialized study in selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.

## Korean

In The Department of Linguistics and Asian/Middle Eastern Languages
In the College of Arts and Letters

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Faculty
Chair: Samraj
Lecturer: Kim
Offered by the Department of Linguistics
and Asian/Middle Eastern Languages
Certificate in Korean studies.
Offered by International Business
Major in international business, with emphasis in Korean.

## Korean Studies Certificate

## (SIMS Code: 114201)

The Department of Linguistics and Asian/Middle Eastern Languages offers a basic certificate in Korean studies. The certificate requires 12 units to include Korean 321 [or Asian Studies 321]; six units selected from Korean 301, 302, 331; and three units selected from Korean 430 [or Asian Studies 430], Political Science 362, or Religious Studies 345.

Students must obtain a grade of $C$ (2.0) or better in each of the certificate courses. Under certain circumstances, comparable courses taken at other institutions may count toward the certificate. Such courses must be evaluated and approved by the certificate adviser. To register in the certificate program, contact the certificate adviser in the Department of Linguistics and Asian/ Middle Eastern Languages.

## Language Requirement for the

## B.A. Degree in Liberal Arts and Sciences

Students electing the study of Korean to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Korean 201 or the equivalent level of achievement. The usual sequence of coursework is Korean 101, 102, and 201. Refer to section of catalog on "Graduation Requirements" for additional ways to satisfy competency.

## High School Equivalents

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:

1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

## Courses (KOR)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

Native speakers of Korean will not receive credit for taking lower division courses except with advance approval from the department.

All lower division courses in Korean are taught in Korean.
No credit will be given for lower division courses taken after successfully completing any upper division Korean course taught in Korean.

No credit will be given for Korean 101, 102, 201, 202, 301, and 302 taken out of sequence.
KOR 101. Elementary Korean I (5) [GE]
Language skills to include reading, writing, listening, speaking Korean at elementary level. Basic sentence patterns, useful expressions, basic communication strategies, relationship between language and culture. Not open to students with credit in Korean 102, 201, 202, 301, or a higher-numbered Korean course.
KOR 102. Elementary Korean II (5) [GE]
Prerequisite: Korean 101 or two years of high school Korean.
Continuation of Korean 101. Elementary-level reading, writing, listening, speaking Korean. Language competence to include sentence patterns, useful expressions, communication strategies. Not open to students with credit in Korean 201, 202, 301, or a high-er-numbered Korean course.
KOR 201. Intermediate Korean I (5) [GE]
Prerequisite: Korean 102 or completion of the third year of high school Korean.

Acquisition of grammatical patterns of complex sentences. Expansion of vocabulary and phrases in expressing ideas in various settings. All four language skills emphasized with cultural competency. Not open to students with credit in Korean 202, 301, or a higher-numbered Korean course.
KOR 202. Intermediate Korean II (5) [GE]
Prerequisite: Korean 201 or completion of the fourth year of high school Korean.

Continuation of Korean 201. Further development of four language skills with emphasis on cultural competency. Complex sentence structures and ability to write short essays. Reading of contemporary work. Not open to students with credit in Korean 301 or a higher-numbered Korean course.
KOR 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
All upper division courses in Korean are taught in Korean unless otherwise stated.

No credit will be given for Korean 301 and 302 taken out of sequence.

## KOR 301. Advanced Korean I (3) [GE]

Prerequisite: Korean 202.
Spoken and written modern Korean. Acquisition of complex sentences with advanced grammatical patterns. Development of fluency in conversing on a variety of topics in everyday situations. Not open to students with credit in Korean 302.

## KOR 302. Advanced Korean II (3) [GE]

Prerequisite: Korean 301.
Continuation of Korean 301. Spoken and written modern Korean. Acquisition of complex sentences with advanced grammatical patterns. Build competency in communicating on a variety of topics in everyday situations.
KOR 321. Korean Civilization (3) [GE]
(Same course as Asian Studies 321)
Prerequisite: Upper division standing.
Development of art, religion, philosophy, political, social institutions through different periods in Korean history. Humanistic dimensions of the Korean mind, traditions, heritage. Taught in English.

## KOR 331. Business Korean I (3)

Prerequisite: Korean 202.
Language skills to perform basic business in Korean business environment. Learn business etiquette and attain broad understanding of business culture in Korea.
KOR 430. Contemporary Korean Culture Through Media (3) [GE] (Same course as Asian Studies 430)
Prerequisite: Upper division standing.
Contemporary Korean culture and society as reflected in various modes of media (news, drama, film, instructional technology). Korean culture in neighboring countries and beyond. Historical perspective to modern Korean culture. Taught in English.
KOR 490. Practicum in Teaching Korean as a Second Language (3) Cr/NC
Six hours of activity.
Prerequisites: Native or native-like fluency in Korean (through proficiency test) and consent of instructor.

Supervised experience and practicum in basic methods of teaching Korean, culminating in a written report. Students will be assigned to appropriate class sections within selected Korean language classes as tutors under staff supervision. Maximum credit six units.

## KOR 496. Topics in Korean Studies (1-4)

Topics in Korean language, literature, culture, and linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit eight units. May be taught in English.

## KOR 499. Special Study (1-3)

Prerequisite: Korean 202.
Individual study. Maximum credit six units.

## Latin

Refer to "Classics" in this section of the catalog.

# Language, Culture, and Society 

In the College of Arts and Letters

OFFICE: Storm Hall West 214
TELEPHONE: 619-594-5268 / FAX: 619-594-4877
WEBSITE: http://linguistics.sdsu.edu
Faculty
Chair: Samraj
Faculty assigned to teach courses in the language, culture, and society major are drawn from departments within the College of Arts and Letters.

## Offered by the Department of Linguistics <br> and Asian/Middle Eastern Languages

Major in language, culture, and society with the B.A. degree in liberal arts and sciences.

## The Major

The major in language, culture, and society offers an exploration of the relationship between language, social factors and culture, multilingualism, language variation, and theories about how language is shaped by, and in turn shapes, our understandings about the world, social relations, identities, and power. This major offers a coherent interdisciplinary curriculum with coursework that will provide theories and analytical frameworks to explore language use and variation across cultures and social contexts. Students receive foundational knowledge of the two disciplines, linguistics and anthropology, and will be immersed in sustained inquiry of social, cultural and linguistic systems, with a focus on the interdependence of these systems. The major enables students to perform analyses of language use to investigate the nature of language and power, language use and identity construction, language and world-view, gendered speech, discourse styles and social roles and relations, and cultural traditions and language arts. The major also involves consideration of issues of bilingualism and multilingualism, and related issues of language ideology and policy.

Graduates gain expertise to address complex social problems in a globalized, pluralistic twenty-first century world and qualify for employment in applied careers in nonprofit associations, federal, state, local government and international agencies, community centers, refugee organizations, cultural institutes, and tech companies. Graduates can pursue graduate work in anthropology, law, linguistics, or a variety of interdisciplinary areas in the social sciences, especially those related to language and its use.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Impacted Program

The language, culture, and society major is an impacted program. To be admitted to the language, culture, and society major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Language, Culture, and Society Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 22024) (SIMS Code: 114731)
All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in linguistics courses can apply to the degree.

A minor is not required with this major.
Preparation for the Major. Linguistics 101 and Anthropology 102. (6 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirements. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or Linguistics 305 W , or Rhetoric or Writing Studies 305W or 500W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 33 units to include Language, Culture, and Society 300; Anthropology 303, 410; three units selected from Linguistics 420, 501, Anthropology 304; nine units selected from Language, Culture, and Society 483, Linguistics 502, 526, 551; three units selected from Linguistics 363 [or Africana Studies 363] or Linguistics 460 [or American Indian Studies 460 or Anthropology 460]; six units selected from Linguistics 350, 352, 354 , Sociology 410, 412; and three units of a course focusing on a specific culture, from any department.

## Courses (LCS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

## LCS 300. Language, Culture, and Society (3)

Prerequisites: Linguistics 101 and Anthropology 102.
Language, culture, and society study using anthropology and linguistics. Bilingualism, dialect variation, language endangerment and preservation, language ideology and policy, sexism and racism.

## LCS 483. Topics in Language, Culture, and Society (3)

Prerequisites: Language, Culture, and Society 300, Anthropology 102, Linguistics 101.

Topics in language, culture, and society such as language and culture in technology, cross-linguistic lexical semantics and culture, conversational analysis and cultural variation, cross-cultural variation in gendered speech, globalization and English. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

# Latin American Studies 

In the College of Arts and Letters

OFFICE: Arts and Letters 377
TELEPHONE: 619-594-1104
WEBSITE: http://latinamericanstudies.sdsu.edu

## Faculty

Latin American studies is administered by the Latin American Studies Committee. Faculty assigned to teach courses in Latin American studies are drawn from Anthropology, Art and Design, Chicana and Chicano Studies, Communication, Comparative Literature, Economics, Geography, History, Political Science, Public Affairs, Sociology, Spanish and Portuguese Languages and Literatures, Women's Studies; and the Fowler College of Business.
Chair: Ramona L. Pérez (Anthropology)
Undergraduate Adviser: David Carruthers (Political Science) Committee: Lauer, Mayes, Pérez (Anthropology); González-Rivera, Ibarra, Iglesias Prieto (Chicana and Chicano Studies); Nericcio (English and Comparative Literature); Bosco, Swanson (Geography); Ben, DeVos (History); Carruthers, Graubart, Maher, O’Brien (Political Science); Talavera (Psychology); Esbenshade, Marcelli, Ojeda (Sociology); Schmitz Weiss (Journalism and Media Studies), Vasconcelos (Portuguese); Camargo, Espinosa, Flanigan, Herzog [Emeritus] (Public Affairs); Blanco [Emeritus], Godoy Marquet, Martín-
Flores (Spanish); Lara, Mattingly (Women's Studies)

## Offered by Latin American Studies

Master of Arts degree in Latin American studies.
Master of Business Administration and Master of Arts
in Latin American studies degrees (concurrent program).
Master of Public Administration and Master of Arts in
Latin American studies degrees (concurrent program).
Master of Public Health and Master of Arts in
Latin American studies degrees (concurrent program).
Major in Latin American studies with the B.A. degree in
liberal arts and sciences.
Minor in Latin American studies.

## The Major

The major in Latin American studies is a multidisciplinary program designed to provide an effective understanding of the cultures, histories, societies, economies, and governments of Latin America, offering basic education and training for business or professional careers that require specialized knowledge of this exciting and diverse area of the world.

A major in Latin American studies provides a multitude of career opportunities. Employment possibilities exist not only in Latin America, but throughout the world. Graduates can apply their specialization to service in international organizations and government positions at the federal or state level. Numerous employment situations can be found in the private sector. Private agencies and corporations have significant interests in Latin America and are looking for area specialists. Those students who wish to continue in their studies will find opportunities in teaching at all levels. A major in Latin American studies opens many avenues in the choice of a career.

High school students preparing to enter this program should include in the high school course of study not less than three years of study in one foreign language, preferably Spanish or Portuguese. Proficiency in either of these languages is indispensable to a successful career in this area of study.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible. Students are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Impacted Program

The Latin American studies major is an impacted program. To be admitted to the Latin American studies major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Latin American Studies Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 03081) (SIMS Code: 114301)
All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A minor is not required with this major.
Preparation for the Major. Latin American Studies 101. Three units of statistics or logic selected from Economics 201; Linguistics 270; Philosophy 120; Political Science 201; Psychology 280; Sociology 201; Statistics 119, 250. Six units of electives selected from Anthropology 102; Chicana and Chicano Studies 100; Geography 102, 106; Political Science 103. (12 units)

Language Requirement. Competency equivalent to that normally attained through four college semesters of Spanish or Portuguese or three college semesters of Mixtec. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. All students must earn a minimum of three units by participating in a Latin American international experience such as study abroad, student exchange, internship, coursework in Tijuana, summer program, or other activities approved by the adviser.

Major. A minimum of 27 upper division units to include three units of international experience and nine upper division core units selected from three different departments: Latin American Studies 366 [or Political Science 366], 415 [or History 415], 498; Anthropology 440, 442; Economics 464; Geography 324; History 416, 580*; Political Science 482. The remaining 15 upper division elective units must be selected from courses listed below with no more than nine of the 15 units from any one department. Groups $A, B$, and $C$ below are for guidance only; it is recommended that students avoid taking too many unrelated courses by concentrating their studies in one or two of the groups.

Courses numbered $495,496,498,499$, and 596 from all participating departments, with appropriate content, are acceptable for elective credit with approval of the adviser.

Group A: History, Politics, and Economics. Latin American Studies 325, 350, 366 [or Political Science 366], 370, 415 [or History 415], 420, 430 [or Political Science 430], 498, 553 [or History 553], 556 [or History 556], 580; Chicana and Chicano Studies 340A, 350A, 375; Economics 365, 464; Health and Human Services 350; History 416, 550, 551, 557, 558, 580*; Political Science 361, 482, 566, 568; Public Health 362.

Group B: Cultures and Environments. Latin American Studies 320, 333 [or Anthropology 333], 355 [or Chicana and Chicano Studies 355], 425, 545, 550, 580; Anthropology 350, 439, 440, 442, 520, 529, 533, 582*, 583*; Chicana and Chicano Studies 554; Geography 324, 554*; Political Science 564; Sociology 350, 522, 554; Women's Studies 310*, 512.

Group C: Arts and Literature. Latin American Studies 306 [or Portuguese 306], 307 [or Portuguese 307], 310 [or Chicana and Chicano Studies 310], 380 [or Chicana and Chicano Studies 380], 400 [or Chicana and Chicano Studies 400], 580; Chicana and Chicano Studies 376; Comparative Literature 445, 580*; English 519*; Portuguese 443; Spanish 341, 342, 402, 502, 515.

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*Acceptable with consent of adviser
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## Latin American Studies Minor

## (SIMS Code: 114301)

The minor in Latin American studies consists of a minimum of 15 units of Latin American content courses, with a minimum of 12 units of upper division courses. In addition, all students must demonstrate language competency equivalent to that normally attained through one college semester of Spanish, Portuguese, or Mixtec. All students must complete Latin American Studies 101 and two upper division courses from two of the three course groups listed below. Maximum six units from any one department.

Group A: History, Politics, and Economics. Latin American Studies 325, 350, 366 [or Political Science 366], 370, 415 [or History 415], 420, 430 [or Political Science 430], 498, 553, [or History 553], 556 [or History 556], 580; Chicana and Chicano Studies 340A, 350A, 375; Economics 365, 464; Health and Human Services 350; History 416, 550, 551, 557, 558, 580*; Political Science 361, 482, 566, 568; Public Health 362.

Group B: Cultures and Environments. Latin American Studies 320, 333 [or Anthropology 333], 355 [or Chicana and Chicano Studies 355], 425, 545, 550, 580; Anthropology 350, 439, 440, 442, 520, 529, 533, 582*, 583*; Chicana and Chicano Studies 554; Geography 324, 554*; Political Science 564; Sociology 350, 522, 554; Women's Studies 310*, 512.

Group C: Arts and Literature. Latin American Studies 306 [or Portuguese 306], 307 [or Portuguese 307], 310 [or Chicana and Chicano Studies 310], 380 [or Chicana and Chicano Studies 380], 400 [or Chicana and Chicano Studies 400], 580; Chicana and Chicano Studies 376; Comparative Literature 445, 580*; English 519*; Portuguese 443; Spanish 341, 342, 402, 502, 515.

Courses numbered 495, 496, 498, 499, and 596 from all participating departments, with appropriate content, are acceptable for elective credit with approval of the adviser.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University. In designing their Latin American studies programs for a minor, students may not include courses drawn from their major department.

## *Acceptable with consent of adviser.

## High School Equivalents

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:

1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.

Courses (LATAM)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

Native speakers of Mixtec or Zapotec will not receive credit for taking lower division courses in Mixtec or Zapotec except with advance approval from Latin American Studies.

All lower division courses in Mixtec or Zapotec are taught in Mixtec or Zapotec.

No credit will be given for Latin American Studies 110 and 111 taken out of sequence.
LATAM 101. Introduction to Latin American Studies (3) [GE]
Introduction to Latin American cultures and peoples from an interdisciplinary perspective.

## LATAM 110. Elementary Mixtec I (4) [GE]

Mixtec language and culture. Pronunciation, oral practice, reading, and listening comprehension and essentials of grammar in a communicative context and through task-based activities. Not open to students with credit in Latin American Studies 111.
LATAM 111. Elementary Mixtec II (4) [GE]
Prerequisite: Latin American Studies 110.
Continuation of Latin American Studies 110. Development of increased proficiency in Mixtec language and culture. Pronunciation, oral practice, listening comprehension, reading and writing, and grammar in a communicative context and through task-based activities.

## LATAM 120. Elementary Zapotec I (4) [GE]

Zapotec language and culture. Pronunciation, oral practice, reading, listening comprehension, and essentials of grammar.
LATAM 210. Intermediate Mixtec I (4) [GE]
Prerequisite: Latin American Studies 111.
Further development of speaking and writing skills, both extended to discourse level and with emphasis on language of everyday life. Integrated approach to learning Mixtec to include awareness and appreciation of the Mixtec culture.

## LATAM 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

LATAM 306. Portuguese and Brazilian Cinema and Culture (3) [GE] (Same course as Portuguese 306)
Main movements and productions of Portuguese and Brazilian cinema. Social factors and representations of national identities. Taught in English.
LATAM 307. Brazilian Music and Culture (3) [GE]
(Same course as Portuguese 307)
Prerequisite: Upper division standing.
Brazilian music and culture with emphasis on religious and cultural practices of candomble, capoeira, carnival, and notions of race and class in contemporary Brazilian funk and hip-hop. Taught in English.
LATAM 310. Mexican and Chicano Music (3) [GE-ES]
(Same course as Chicana and Chicano Studies 310)
Music of Mexico and the Southwest including folk dances appropriate for children and adults. Emphasis on the corrido, its history and development in Mexico and the US. Course will be taught bilingually.

## LATAM 320. Culture and Society of Tijuana (3)

Mexican dance, art, music, cuisine, politics, tourism industry, education, and other facets of daily life through visits to selected venues.
LATAM 325. Political Economy of Brazil (3) [GE]
Prerequisite recommended: Latin American Studies 101 with a grade of C (2.0) or better.

Effects of development policies, global interactions, and neoliberal economic strategies on the cultures and people of Brazil.

LATAM 333. Race, Ethnicity, and Identity in the Americas (3) [GE] (Same course as Anthropology 333)
Prerequisite: Latin American Studies 101 or Anthropology 102.
History and contemporary forms of identity to include ethnicity, gender, nationality, race, and sexuality in Canada, Latin America, and United States
LATAM 350. Globalization and the Americas (3) [GE]
Causes and consequences of international integration in western hemisphere, including United States and Canada. Emphasis on Latin America. Multiple dimensions of integration examined from variety of disciplinary perspectives.
LATAM 355. The United States-Mexico International Border (3) [GE-ES]
(Same course as Chicana and Chicano Studies 355)
Prerequisite: Upper division standing.
History, culture, economics, and politics of US/Mexico border region. Theories and policy issues surrounding development of region; local regional problems and major agencies, institutions, organizations addressing these problems.
LATAM 366. Latin American Politics (3)
(Same course as Political Science 366)
Introduction to Latin American politics. Knowledge of political change and political systems in Latin America, viewed historically and comparatively, using concepts and theories applicable to more general political analysis.
LATAM 370. History of Mexico: From Independence to Early Twentieth Century (3) [GE]
Prerequisite recommended: Latin American Studies 101.
Cultural history of Mexico from Mexico's independence from Spain in early nineteenth century to presidency of Lazaro Cardenas. History of legacy of Caudillos, evolution of PRI, and US/Mexico relations from a Mexican perspective.
LATAM 380. US/Mexico Borderlands Folklore (3) [GE-ES]
(Same course as Chicana and Chicano Studies 380)
Prerequisite recommended: Chicana and Chicano Studies 110.
Border folklore, its complexities and dynamics via myths, rituals, legends, sayings, corridos (ballads), and literature of Chicanos and Mexicanos in the US-Mexican border region.
LATAM 400. Mexican Images in Film (3) [GE-ES]
(Same course as Chicana and Chicano Studies 400)
Prerequisite: Upper division standing.
Comparative study of images presented by Hollywood, Mexican, and Chicano cinemas. Critical analysis and discussion of projected values. Comparison of themes in film and text.
LATAM 415. Pre-Contact and Colonial Latin America (3) [GE] (Same course as History 415)
Indigenous and colonial history of Latin America, pre-contact through early national period.
LATAM 420. Latin America Through Film (3) [GE]
Prerequisite recommended: Latin American Studies 101.
Exploration of diverse cultures and history of Latin America through feature film by Latin American cinematographers. Political, social, and historic phenomena.
LATAM 425. Illness, Health, and Healing in
Latin America (3) [GE]
Cultural, economic, political, and social aspects of healing, health, and illness in Latin America.
LATAM 430. Immigration and Border Politics (3) [GE]
(Same course as Political Science 430)
Prerequisite: Completion of the American Institutions requirement.
U.S. immigration and border politics within a global and historical perspective. Transformations of sovereignty, communities, identity, and rights within an area of mass migration and economic interdependence. Policy and popular debates about admission, border control, and incorporation of migrants.

LATAM 450. Study Abroad in Latin American Studies (3) [GE]
Prerequisites: Upper division standing. See Class Schedule for additional prerequisites.

Selected topics in Latin American studies. Courses taught abroad through a program approved by the Center for Latin American Studies. May be repeated with new content. See Class Schedule for specific content and geographic location. Maximum credit six units of which three units may be applicable to General Education.
LATAM 495. Latin American Studies Internship (3) $\mathrm{Cr} / \mathrm{NC}$
Prerequisites: Six upper division units in Latin American content courses.

Opportunity for Latin American studies undergraduates to implement area specialist skills. Placement with a local organization with legal, commercial, or social service functions whose activities are primarily Latin American related. May be repeated with new content. Maximum credit six units.
LATAM 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## LATAM 498. Seminar on Latin America (3)

Exploration of the interdisciplinary approach to Latin America including evaluation of relevant resources and methods. Taught by a team of instructors representing two or more disciplines.

## LATAM 499. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
LATAM 545. The Latin American City (3)
Prerequisite: Upper division or graduate standing in Latin American studies, anthropology, Chicana and Chicano studies, history, political science, or sociology.

History and theory of urbanization in Latin America to include urban landscapes, rural to urban migrations, re-creation of community within urban centers, modified identities, globalized labor, segregation, and community borders.
LATAM 550. Mexican-US Border from a Latin American
Perspective (3)
Prerequisites: Six upper division units with Latin American content. Spanish proficiency.

Multidisciplinary analysis of Mexican-US border region.
LATAM 553. History of Slavery in the Americas (3)
(Same course as History 553)
Prerequisite: Upper division or graduate standing.
Trans-Atlantic slavery from the fifteenth to nineteenth centuries. Liberation movements, nation-states, revolution, slavery, and capitalism. Agency of enslaved people, agricultural and environmental transformations, legacies of trans-Atlantic slavery and contemporary enslavement, new communities and diversities, race and racism.

## LATAM 556. History of Brazil (3)

(Same course as History 556)
Prerequisite: Upper division or graduate standing.
Economic, political, and social history of Brazil from precolonial era to present. Democratic and dictatorial rule, industrialization, populism, race and racism, and slavery.
LATAM 580. Special Topics (1-4)
Prerequisites: Six upper division units in Latin American content courses.

Interdisciplinary study of selected Latin American topics. Credit will vary depending on the scope and nature of the topic. Whenever appropriate, the course will be taught by a team of instructors representing two or more disciplines. May be repeated with different content. See Class Schedule for specific content. Maximum credit eight units.

# Learning Design and Technology 

In the College of Professional Studies and Fine Arts

OFFICE: Professional Studies and Fine Arts 361*
TELEPHONE: 619-594-5450 / FAX: 619-594-6246
E-MAIL: Idt@sdsu.edu
WEBSITE: http://ldt.sdsu.edu
*PSFA office locations are subject to change due to construction. Check the website at http://psfa.sdsu.edu for current office locations.

## Faculty

Emeritus: Allen, Anthony, Dodge, Harrison, Hoffman, Mathison, McAllister, Ritchie, Rossett, Saba

## Area Coordinator:

Professors: Bober-Michel, Wang
Offered by the School of Journalism and Media Studies
Master of Arts degree in learning design and technology.
Minor in learning design and technology.
Certificate in distance education
(refer to the Graduate Bulletin).
Certificate in instructional design
(refer to the Graduate Bulletin).
Certificate in instructional technology.

## Learning Design and Technology Minor

 (Minor Code: 08999) (SIMS Code: 664645)The minor in learning design and technology consists of a minimum of 15 units to include Learning Design and Technology 540, 544 , and nine units selected from Learning Design and Technology $515,525,561$, or 596 (when applicable).

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable or as prerequisites for the master's degree concentration in learning design and technology. A minimum of six upper division units must be completed in residence at San Diego State University.

## Instructional Technology Certificate

(SIMS Code: 664601)
To receive a certificate in instructional technology, candidates must meet departmental admission requirements (which include relevant work experience or academic preparation), complete 12 units of coursework to include Learning Design and Technology 540,544 , and six units selected from Learning Design and Technology 561 and 596 (when applicable).

With the approval of the program adviser, a student may apply no more than three units of coursework from the certificate program toward a minor.

## Courses (LDT)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSE

LDT 296. Experi mental Topics (1-3)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

LDT 410. Social Media for Learning (3)
Two lectures and one hour of discussion.
Prerequisites: Journalism and Media Studies 408 with a grade of C (2.0) or better. Admission to a major in the School of Journalism and Media Studies.

Social media for learning and workforce training. Current and prospective social media practices in learning organizations. Integration of social media strategies into learning experiences.

## LDT 432. Producing Digital Learning Media (3)

One lecture and four hours of activity.
Prerequisites: Journalism and Media Studies 408 with a grade of C (2.0) or better. Admission to a major in the School of Journalism and Media Studies.

Design and development of technology-delivered multimedia training and education materials. Principles of training design applied to diverse organizations and audiences. Production of digital media and tools for learning in organizations.

## LDT 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## LDT 499. Special Study (1-3)

Prerequisites: Consent of instructor. Open only to senior and graduate students in education who have shown ability to work independently.

Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
LDT 515. Games, Play, and Learning (3)
Prerequisite: Upper division or graduate standing.
Analysis of games and play from cognitive, historical, motivational, and social perspectives. Design of simple learning games. Survey of the game industry and use of games in education and training.
LDT 525. Virtual Reality, Imaginary Worlds, and Future of Learning (3)
Prerequisite: Upper division standing or admission to a graduate program in learning design and technology or journalism and media studies.

Learning experiences using virtual reality and worlds. Cognitive load in novel environments, sensory perception, theories and models of social interaction. Implications of virtual interaction.

## LDT 540. Educational Technology (3)

Six hours of activity.
Rationale, foundations, theories, careers, trends, and issues in educational technology. Implications of educational technology for instruction and information in schools, government, and corporations. (Formerly numbered Educational Technology 540.)

## LDT 544. Instructional Design (3)

One lecture and six hours of laboratory.
Prerequisite: Learning Design and Technology 540.
Systematic design of products for education and training. Use of analyses and content mapping to set instructional goals. Instructional methods derived from learning theories for use in schools, universities, corporations, and other settings. Rapid prototyping of instructional products. (Formerly numbered Educational Technology 544.)
LDT 561. Advanced Multimedia Design for Learning (3)
Six hours of activity.
Prerequisite: Learning Design and Technology 540.
Educational visualization with digital video, animation, sound, 2D and 3D graphics for mobile and web-based learning. (Formerly numbered Educational Technology 561.)
LDT 596. Topics in Learning Design and Technology (1-3)
Selected problems in educational technology. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

# Lesbian, Gay, Bisexual, and Transgender Studies 

In the College of Arts and Letters

OFFICE: Arts and Letters 317
TELEPHONE: 619-594-6924

## Faculty

Faculty assigned to teach lesbian, gay, bisexual, and transgender studies courses are drawn from the colleges at San Diego State University. The program is housed in the College of Arts and Letters.

## Program Director and Undergraduate Adviser:

Esther D. Rothblum (Women's Studies)
Committee: Alameen-Shavers (Africana Studies), Ben (History), Benkov (French, Emeritus), Blashill (Psychology), Borgstrom (English), Calzo (Public Health), Cayleff (Women’s Studies), Cline (History), Clune-Taylor (Women's Studies), Colvin (Public Affairs), Corliss (Public Health), Draz (Philosophy), Elliott (Sociology), Geist-Martin (Communication, Emeritus), Ghosh (Women's Studies), Goehring (Communication), González-Rivera (Chicana and Chicano Studies), Horvath (Psychology), Howard (English and Comparative Literature), Jarmakani (Women's Studies), Kim (Public Affairs), Kim (Sociology), Kuefler (History), Lindemann (Communication), Matos (English and Comparative Literature), Mattingly (Women's Studies), Miller (Counseling and School Psychology), Mohammed (Religious Studies), Nieves (History), O'Brien (Political Science), Penrose (History), Rodriguez (Journalism and Media Studies), Schreiber (Political Science), Urada (Social Work), Vaughn (Psychology), Whatcott (Women's Studies)

## Offered by Lesbian, Gay, Bisexual, and Transgender Studies

Major in lesbian, gay, bisexual, transgender, queer, and plus (LGBTQ+) studies with the B.A. degree in liberal arts and sciences.
Minor in lesbian, gay, bisexual, transgender, queer, and plus (LGBTQ+) studies.
Certificate in lesbian, gay, bisexual, transgender, queer, and plus (LGBTQ+) studies
(refer to the Graduate Bulletin).

## The Major

The interdisciplinary major in lesbian, gay, bisexual, transgender, queer, and plus (LGBTQ+) studies advances knowledge in sexual and gender identity, and increases understanding of the diverse cultural, historical, ethnic/racial, and contemporary experiences of people across sexualities. The focus is on the changing nature of same-sex desire, sexual behavior, and same-sex relationships from antiquity to the present. Courses focus on emerging LGBTQ+ subcultures and identities from a global perspective. From there, courses address scientific and psychological explanations of LGBTQ+ identities, LGBTQ+ literature, the institutions of law and government, education and the workplace, family, and healthcare. We will finish by looking at local and international LGBTQ+ movements, popular culture, and news media in the current day. Throughout the program of study, we will carefully consider the full range of genders, sexualities, races, ethnicities, classes, physical abilities, religions, and political persuasions that characterize current LGBTQ+ movements and communities.

Courses are designed to provide students with a comprehensive, integrated, and scholarly education. The major also exposes students to community service and activism via a large selection of internships, and to global sexuality issues via international experiences.

A degree in lesbian, gay, bisexual, transgender, queer, and plus (LGBTQ+) studies prepares students for a large variety of careers. Students majoring in lesbian, gay, bisexual, transgender, queer, and plus (LGBTQ+) studies can work in LGBTQ+ non-profit agencies, law, local and national politics, health care settings, counseling centers, journalism, news media, theatre, film, fine arts, and education. LGBTQ+ studies majors may go on to obtain graduate
degrees, preparing for a career as an LGBTQ+ studies scholar. LGBTQ+ studies majors can also double-major to enhance their career opportunities.

## Advising

Students are required to meet with the undergraduate adviser in order to declare the major. All students admitted to the university with a declared major in lesbian, gay, bisexual, transgender, queer, and plus (LGBTQ+) studies are urged to meet with the undergraduate adviser either prior to or during their first semester.

## Impacted Program

The lesbian, gay, bisexual, transgender, queer, and plus (LGBTQ+) studies major is an impacted program. To be admitted to the lesbian, gay, bisexual, transgender, queer, and plus (LGBTQ+) studies major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Lesbian, Gay, Bisexual, Transgender, Queer, and Plus (LGBTQ+) Studies Major

 With the B.A. Degree in Liberal Arts and Sciences (Major Code: 22990) (SIMS Code: 119508)All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." Students majoring in lesbian, gay, bisexual, transgender, queer, and plus (LGBTQ+) studies must complete a minor in another field to be approved by the program director or major adviser of LGBTQ+ studies.

Preparation for the Major. Six units selected from History 101, Psychology 101, Sociology 101, Television, Film and New Media 160, Women's Studies 101, 102. (6 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 27 upper division units to include 15 units selected from Lesbian, Gay, Bisexual, and Transgender Studies 321, 322 [or Humanities 322]; History 406; English 450, 550, or Television, Film and New Media 470*+; Lesbian, Gay, Bisexual, and Transgender Studies 598 or an international study abroad course*; and 12 elective units selected from General Studies 340; History 583; Journalism and Media Studies 410+; Psychology 355; Sociology 320, 420; Women's Studies 360, 535; or any department 499 course (with approval of major adviser). Additional courses are acceptable with approval of the adviser.

[^14]
## Lesbian, Gay, Bisexual, Transgender, Queer, and Plus (LGBTQ+) Studies Minor <br> (Minor Code: 22990) (SIMS Code: 119509)

Dr. Esther D. Rothblum, Department of Women's Studies, is adviser for this minor.

The interdisciplinary minor in lesbian, gay, bisexual, transgender, queer, and plus (LGBTQ+) studies consists of a minimum of 15 units to include Lesbian, Gay, Bisexual, and Transgender Studies 321, 322 [or Humanities 322], and nine units selected from Lesbian, Gay, Bisexual, and Transgender Studies 598, English 450, 550, General Studies 340, History 406, 583, Journalism and Media Studies 410*, Psychology 355*, Sociology 320*, 420*, Television, Film and New Media 470*, Women's Studies 360, 535, or any department 499 or upper division course with appropriate content with approval of minor adviser. Additional courses are acceptable with approval of minor adviser.

Courses in the minor may not be counted towards the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.
*Additional prerequisites required.

## Courses (LGBT)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

LGBT 101. Introduction to LGBTQ+ Studies (3) [GE]
Diversity of LGBTQ+ communities, identities, politics, sexual and gender bodies. Intersectionality of age, class, color, embodiment, ethnicity, gender, personhood, religion, and sexuality.

## LGBT 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
LGBT 321. LGBT Identities in the Modern World (3) [GE]
Interdisciplinary field of lesbian and gay studies with attention to social and political institutions and development of personal identity. Topics include discrimination, internalized homophobia, political activism, and diversity within lesbian, gay, bisexual, and transgender community.
LGBT 322. LGBT History and Culture (3) [GE]
(Same course as Humanities 322)
Interdisciplinary field of lesbian and gay studies with attention to history and artistic expression. Topics include varying attitudes toward homosexuality in history, as well as literary, artistic, theatrical, and musical contributions of the lesbian, gay, bisexual, and transgender community.

## LGBT 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
LGBT 596. Selected Topics in Lesbian, Gay, Bisexual, and Transgender Studies (1-3)
Prerequisite: Upper division or graduate standing.
Selected topics in lesbian, gay, bisexual, and transgender studies. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## LGBT 598. Lesbian, Gay, Bisexual, and Transgender Studies

## Internship (3) $\mathrm{Cr} / \mathrm{NC}$

Prerequisite: Lesbian, Gay, Bisexual Transgender, Queer, and Plus Studies major or minor.

Lesbian, gay, bisexual, and transgender studies theories and scholarship to community service and activism. Internship includes 120 hours of work in local public and private agencies serving LGBT populations and working towards LGBT equality. Maximum credit six units.

## Liberal Studies

IN THE COlLEGE OF EDUCATION

OFFICE: Education and Business Administration 255
TELEPHONE: 619-594-6131 / FAX: 619-594-7828
WEBSITE: http://libst.sdsu.edu

## Faculty

Faculty assigned to teach liberal studies courses are drawn from the colleges at San Diego State University.
Emeritus: Roeder, P.
Program Director: Virginia Loh-Hagan, Ed.D.

## Offered by the School of Teacher Education

Major in liberal studies with the B.A. degree
in applied arts and sciences.
Emphasis in education-generalist.
Emphasis in elementary education.
Emphasis in integrated teacher education program (ITEP-MS). Emphasis in mathematics.
Emphasis in science.

## The Major

The liberal studies major is designed for students who intend to teach at the elementary or middle school levels. Individuals learn to think critically, analyze evidence thoughtfully, and write clearly and effectively. Graduates develop a rich understanding of the major subject areas, including why and how practitioners create new knowledge. They learn to identify and understand the developmental stages of children and to observe, interview, and tutor children effectively in classroom settings.

Many of the lower and upper division core courses are specifically designed for future teachers, including children's literature, linguistics, history, mathematics, science, visual and performing arts, physical education of children, and child development. The content covered in these courses closely matches the content that teachers will ultimately have to teach in the schools as well as the content assessed by the California Subject Examination for Teachers Multiple Subject (CSET-MS) examination.

Throughout the first three years, students work on critical thinking, research, and writing skills. During their second or third semester, they take Education 200, Teaching as a Profession. In this course, they complete 45 hours of fieldwork during which they critically assess issues related to teaching in culturally and linguistically diverse school settings, learn about career paths, and evaluate their occupational fitness for the teaching profession. During their junior year, students take Liberal Studies 300, Introduction to Liberal Studies, where they complete an additional 30 hours of fieldwork. They focus both on the nature of the disciplines-goals, processes, and evaluation-as well as how the knowledge being learned will ultimately be used in the classroom. During their senior year, students complete Liberal Studies 498, Assessment in Liberal Studies. This course supports students as they complete their capstone projects. These interdisciplinary courses plus the core subject matter courses provide a strong foundation for students' future careers.

Emphasis in Education-Generalist. This emphasis, designed to prepare students for teaching in elementary schools, is available only for transfer students who complete the California Community College Associate in Arts in Elementary Teacher Education (AAT) degree and complete the Transfer Model Curriculum (TMC) for Liberal Studies/Integrated Teacher Education. Students choose a literacy, mathematics, or science focus; no option is required.

Students who choose the literacy focus in this emphasis complete the 32 units and specific coursework required to earn a Middle School Subject Matter Authorization in English, provided they earn a grade of C (2.0) or better in each course. When coupled with a multiple subject credential, this authorization allows individuals to teach elementary school or English in middle school if they so desire.

Students intending to transfer to liberal studies from local community colleges are strongly encouraged to use electives to complete courses equivalent to Exercise and Nutritional Sciences 241A, 241B; Mathematics 211; Mathematics Education 212; and Music 102, so that they will have elective units available if they wish to pursue a career option that requires additional coursework or prerequisites. Transfer students should not take focus or option courses prior to matriculating at San Diego State University.

Emphasis in Elementary Education. This emphasis is designed primarily for students who wish to teach at the elementary school level or pursue a career that requires an interdisciplinary liberal arts degree. Students complete both a focus and an option. The 18-21 unit focus provides an opportunity for students to explore the habits of mind and methods used in a chosen subject area as they develop both their depth and breadth of knowledge and experience. Three foci are available: literacy, mathematics, and science. The six to seven unit option helps students (a) earn the Basic Certificate in Teaching English as a Second or Foreign Language (when paired with a literacy), (b) begin preparation for the SDSU bilingual or special education credential programs, or (c) further explore the performing arts. This emphasis provides the greatest flexibility in meeting specific career goals or pursuing a variety of interests.

Students who choose the literacy focus develop depth in linguistics, literature, and theatre. The focus is designed so that they also complete the 32 units and specific coursework required to earn a Middle School Subject Matter Authorization in English, provided they earn a grade of $C(2.0)$ or better in each course. When coupled with a multiple subject credential, this authorization allows individuals to teach English in middle school if they so desire.

Students who choose the mathematics or science focus learn to think like mathematicians or scientists as they build breadth and depth in their subject area. Once they have completed some of the coursework in their focus, they need to choose whether to take additional math or science courses or to complete one of the options described above. If they choose to take additional mathematics or science courses, they can qualify to teach middle school as described below under the mathematics or science emphases.

Emphasis in Integrated Teacher Education Program (ITEP-MS). The liberal studies major with an emphasis in integrated teacher education program (ITEP-MS) is designed primarily for students who wish to teach at the elementary school level. This program integrates the study of interdisciplinary liberal arts courses with professional preparation courses and field experiences leading to a Preliminary Multiple Subject Teaching Credential. Successful completion of the liberal studies major with an emphasis in integrated teacher education program (ITEP-MS) includes both a Bachelor of Arts degree in Applied Arts and Sciences and a Preliminary Multiple Subject Teaching Credential. This program includes subject matter in arts, English, humanities, mathematics, pedagogy, science, social sciences, and student teaching. Students are required to fulfill the international experience requirement and may participate in faculty-led travel abroad opportunities during spring break or summer. In addition, students will register in Education 450 for one unit. The emphasis combines the degree and credential into a 131 unit, eight semester, four year integrated teacher education program. Upon completion of the program, students satisfy requirements set forth by the California Commission on Teacher Credentialing (CTC).

Emphasis in Mathematics. The demand for mathematics teachers continues to be high. Students complete the focus in mathematics described above plus a nine unit option in mathematics, which provide the 32 units and specific coursework required to earn a Middle School Subject Matter Authorization in mathematics, provided they earn a grade of $C$ (2.0) or better in each course. When coupled with a multiple subject credential, this authorization allows individuals to teach mathematics in middle school if they so desire.

If students wish to further enhance their employability, they may attempt to pass the two CSET examinations-110 on algebra and 111 on geometry-required for a Foundational Level Mathematics certification. Graduates who pass these tests may choose to earn a multiple subject credential and add a single subject authorization by taking the extra, single subject mathematics methods course, Teacher Education 914. Those whose sole goal is to teach middle school, however, may choose to do the regular single subject credential program, which gives them the advantage of doing their student teaching in a middle school or high school class. A single subject credential in Foundational Level Mathematics qualifies individuals to teach general mathematics, algebra, geometry, probability and statistics, and consumer mathematics at the middle school or high school level.

Emphasis in Science. The demand for middle school science teachers also continues to be high. Students complete the focus in science described above plus a seven to nine unit option in science, which provide the 32 units and specific coursework required to earn a Middle School Subject Matter Authorization in science provided they earn a grade of $C(2.0)$ or better in each course. When coupled with a multiple subject credential, this authorization allows individuals to teach science in middle school if they so desire.

With proper selection of courses (Biology 101, 101L; Chemistry 200; and Physics 180A, 182A) and completion of a portfolio, this emphasis also leads to a Foundational Level General Science certification. This program was approved by the Commission on Teacher Credentialing in October 2011. Thus, students satisfy subject matter competency; they do not have to pass the CSET science tests-118 on earth science and physics and 119 on life science and chemistry. For maximum employability, graduates may choose to earn a multiple subject credential and add a single subject authorization by taking the extra single subject science methods course, Teacher Education 914. Graduates whose sole goal is to teach middle school, however, may choose to do the regular single subject credential program, which gives them the advantage of doing their student teaching in a sixth, seventh, or eighth grade classroom.

## Advising

Advising is extremely important because students must make numerous decisions that include choosing their emphasis, focus, and option; selecting appropriate courses; and preparing for the senior-level assessments. See the website for current information, advising procedures, and e-mail questions. Information about SDSU credential programs and financial aid opportunities is available at the College of Education, Office of Student Services, EBA259, 619-594-6320, and in the Graduate Bulletin.

## Retention Policy

The liberal studies program expects that all majors will make reasonable academic progress towards the degree. Liberal studies premajors who have completed major preparatory courses, earned 60 units, but have less than a 2.7 may be removed from the premajor and placed in undeclared.

## Impacted Program

The liberal studies major is an impacted program. To be admitted to the liberal studies major with an emphasis in elementary education, integrated teacher education program (ITEP-SS), mathematics, or science, students must meet the following criteria:
a. Complete a minimum of 60 transferable semester units;
b. Have a cumulative GPA of 2.70 or better;
c. Complete all courses listed in Preparation for the Major sections for the liberal studies major;
d. Complete with a grade of $C(2.0)$ or better: a certified Area Al Oral Communication course; a certified Area A3 Critical Thinking course; Exercise and Nutritional Sciences 241A and 241B; and Mathematics 210 and 211. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
e. Earn a passing score on the SDSU Liberal Studies Mathematics Proficiency Assessment;
f. Declare the liberal studies major by following the procedures explained on the website.
To complete the major, students must fulfill the degree requirements for the major and emphasis described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

To be admitted to the liberal studies major with an emphasis in Education-Generalist, students must complete the Transfer Model Curriculum (TMC) for Liberal Studies and satisfy criteria "a" and "b."

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Liberal Studies Major

With the B.A. Degree in Applied Arts and Sciences

## (Major Code: 49012)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

Completion of the liberal studies major fulfills General Education requirements.

A minor is not required for this major.
International Experience Requirement. In recognition of the increasing globalization in all sectors of world society, the Liberal Studies International Experience has been established. Students participate in designated, pre-approved study abroad experiences in a different country. Options include a variety of short term and semester formats designed to meet the needs of different students, including those with family and work responsibilities. The purpose of the experience is to increase student awareness of cross-cultural and global issues - issues that are critical to their development as future teachers and citizens in a complex, rapidly changing world. All liberal studies majors are required to participate in an international experience approved by the program director.

To meet the international experience requirement, majors must complete one of the following:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;

OR
5. One course selected from:

- Liberal Studies 351;
- Arts and Letters 450;
- Asian Studies 490;
- Education 450;
- General Studies 450;
- Health and Human Services 350;
- International Security and Conflict Resolution 450;
- Latin American Studies 450;
- Political Science 450;
- Science 350.


## Lower Division Core (46-50 units)

Students in the Elementary Education, Mathematics, Science, and Integrated Teacher Education Program (ITEP-MS) emphases must complete the following General Education and American Institutions requirements and Education 200.
I. Communication and Critical Thinking: ${ }^{1} 9$ units.

You may not use credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ) grades in this section.

1. Oral Communication (3 units). A grade of $C$ (2.0) or better is required.
2. Written Communication (3 units). A grade of C- (1.7) or better is required.
3. Critical Thinking (3 units). A grade of $C$ (2.0) or better is required.
II. and III. Foundations of Learning: 34 minimum units.
A. Natural Sciences and Quantitative Reasoning (10 units)
4. Biology 100 (3 units).
5. Biology 100L (1 unit).
6. Geological Sciences 104 (3 units).
7. Mathematics 210 (3 units). Complete with a grade of $C$ (2.0) or better [cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ )].
B. Social and Behavioral Sciences ( 9 minimum units)
8. Geography 106 (3 units).
9. Three units selected from Africana Studies 170A, American Indian Studies 140, Chicana and Chicano Studies 141A, History 109.
10. Three units selected from Africana Studies 170B, American Indian Studies 141, Chicana and Chicano Studies 141B, History 110, Political Science 102.
C. Humanities (12-13 units) (ITEP-MS refer to emphasis)
11. Literature: Three units selected from Comparative Literature 270A, 270B; English 220.
12. Visual and Performing Arts: Theatre 100 (3 units).
13. History: History 100 (3 units).
14. Philosophy, Religious Studies, or Foreign Language ${ }^{(2)}$ (3-4 units).
III. Lifelong Learning and Self-Development
15. Child and Family Development 170 [or Teacher Education 170] (3 units). ${ }^{3}$
${ }^{(1)}$ See the General Education requirements in Communication and Critical Thinking.
${ }^{(2)}$ See the General Education requirement in Foundations of Learning IIC2. Three to four units selected from Africana Studies 240, Philosophy or Religious Studies or Foreign Language. See liberal studies adviser.
${ }^{(3)}$ Students may substitute a transfer course equivalent to SDSU course Child and Family Development 270 in lieu of Teacher Education 170 [or Child and Family Development 170].
IV. Liberal Studies: 3 units.

Education 200 (3 units).

## Emphasis in Education-Generalist

(SIMS Code: 331921)
Open only to AA-T/TMC for Elementary Teacher Education
Preparation for the Major. The emphasis in education-generalist is open only to students who have completed the California Community College Associate in Arts in Elementary Teacher Education (AA-T) degree and completed the Transfer Model Curriculum (TMC) for liberal studies/integrated teacher education. ${ }^{(1)}$ Additional preparation for the major (10 units): Exercise and Nutritional Sciences 241A, 241B (complete with a grade of C (2.0) or better); Mathematics 211 (complete with a grade of C (2.0) or better); Mathematics Education 212; Music 102. Exercise and Nutritional Sciences 241A, 241B and Mathematics 211 may not be taken for credit/no credit (Cr/NC). (10 units)

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above or with a grade of C (2.0) or better in Rhetoric and Writing Studies 280 or 281 [or Linguistics 281] before taking English 306W and earn a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. All liberal studies majors are required to complete the international experience requirement.

Major including required focus. No Option is required. (44.5-50 units)
[NOTE: Plus additional lower division courses.]

## Upper Division Core (40.5-41 units):

Liberal Studies: Liberal Studies 300, 498 (0.5-1 unit);
Mathematics and Science: Mathematics $312^{(2)}, 313^{(2)}$; Physics 412;
Social and Behavioral Sciences: Linguistics 420, 452;
Humanities: Art 387; Education 451; English 306A, 306W; History 411, 413; Music 343.
Focus ( 9 units). All students complete a focus in literacy, mathematics, or science. A minor or second major may not be substituted for a focus.
LITERACY (9 units): Linguistics $253^{(3)}$ [or Rhetoric and Writing Studies $253^{3}$ ] or Linguistics $430{ }^{(4)}$; three units selected from Theatre 310, 315; three units selected from Africana Studies 365A [or English 365A], 365B [or English 365B], American Indian Studies 430, Chicana and Chicano Studies 335 [or English 335], Comparative Literature 470, English 501, 503, Women's Studies 352.
MATHEMATICS (9 units): Mathematics 141, 302, 413.
SCIENCE (9 units): Biology 101, 101L; Geological Sciences 412 (4 units), Teacher Education 211B (1 unit).

[^15]
## Emphasis in Elementary Education

(SIMS Code: 331922)
Preparation for the Major. Complete 46-47 units of lower division core plus Exercise and Nutritional Sciences 241A, 241B (with a grade of C [2.0] or better); Mathematics 211 (with a grade of C [2.0] or better); Mathematics Education 212; Music 102; Natural Science 100 or Chemistry 308 [SDSU Imperial Valley only]. Exercise and Nutritional Sciences 241A, 241B and Mathematics 211 may not be taken for credit/no credit (Cr/NC). (59-60 units)

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above or with a grade of C (2.0) or better in Rhetoric and Writing Studies 280 or 281 [or Linguistics 281] before taking English 306W and earn a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.
International Experience. All liberal studies majors are required to complete the international experience requirement.

Major including required focus and option (50.5-57 units).
[NOTE: Plus additional lower division courses.]
Upper Division Core (40.5-41 units):
Liberal Studies: Liberal Studies 300, 498 (0.5-1 unit);
Mathematics and Science: Mathematics $312^{\circledR}, 313^{\oplus}$; Physics 412;
Social and Behavioral Sciences: Linguistics 420, 452;
Humanities: Art 387; Education 451 ${ }^{\text {® }}$, English 306A, 306W; History 411, 413; Music 343.
Focus ( 9 lower and upper division units). All students complete a focus in literacy, mathematics, or science. A minor or second major may not be substituted for a focus.
LITERACY (9 units):
Linguistics, Theatre, and Literature Courses: Linguistics 430 ${ }^{\oplus}$; three units selected from Theatre 310, 315; three units selected from Africana Studies 365A [or English 365A], 365B [or English 365B], American Indian Studies 430, Chicana and Chicano Studies 335 [or English 335], Comparative Literature 470, English 501, 503, Women's Studies 352.
MATHEMATICS (9 units): [NOTE: Lower and upper division units]. Mathematics 141, 302, 413.
SCIENCE (9 units): [NOTE: Lower and upper division units]. Geological Sciences 412 (4 units); Teacher Education 211B (1 unit); Biology 101 and $101 \mathrm{~L}\left(4\right.$ units) ${ }^{\text {® }}$.
Option ( $9-10$ units). All students complete an option. Some options lead to additional certifications; see the introduction section for details. To complete an additional 8+ units in mathematics or science, change to the Mathematics Emphasis or the Science Emphasis.
Linguistics ${ }^{(8)}$ (9 units): Linguistics $253^{3}$ [or Rhetoric and Writing Studies $253^{3}$ ]; Linguistics 550; Linguistics 555 or 556.
Bilingual (10 units): Linguistics $253{ }^{3}$ (or Rhetoric and Writing Studies $\left.253^{\text {³ }}\right] ;$ Dual Language and English Learner Education 416 and 416L ( 4 units); three units selected from Spanish 302, 381, or 382. Restricted to native or heritage speakers of Spanish or students with advanced placement credit in Spanish 202 and 212.
Special Education (10 units): Linguistics $253{ }^{3}$ [or Rhetoric and Writing Studies $253^{33}$ ]; Special Education 500 , 501,502 (1 unit) (concurrent registration with Special Education 501);
Performing Arts ( 9 units): [Not available at SDSU Imperial Valley]: Prerequisites: Theatre 310 or 315 . Highly recommended prerequisite: one unit of a performing arts course, such as Music 110A, 110B, 175, 185, 212.
Linguistics $253^{3}$ [or Rhetoric and Writing Studies $253^{3}$ ];
Theatre 510; three units selected from Africana Studies 385, Chicana and Chicano Studies 310 [or Latin American Studies 310], Music 345, 351.
Literature ( 9 units): Linguistics $253^{3}$ [or Rhetoric and Writing Studies $253^{3}$ ]; English 502; English 501 or 503 (may not double count in Focus).
${ }^{(1)}$ Students must pass the Liberal Studies Mathematics Proficiency Assessment prior to enrolling in Mathematics 312 and 313.
(2) May substitute Special Education 527 if seeking a special education credential.
${ }^{(3)}$ Verify with a liberal studies adviser.
(4) Prerequisite: Linguistics 420 in the major.
(5) Required for Foundational Level General Science certification. See science emphasis.
${ }^{(6)}$ Required for Introductory Subject Matter Authorization or Foundational Level General Science certification; therefore, required for the science emphasis.
(7) When combined with the literacy focus, students may earn the Basic Certificate in Teaching English as a Second or Foreign Language. See the linguistics section of the catalog.

## Emphasis in Integrated Teacher Education Program (ITEP-MS)

(SIMS Code: 331926)
ITEP Admission Requirements. Students apply for admission to the liberal studies major with an emphasis in integrated teacher education program (ITEP-MS) during the spring semester of their sophomore year. Students who qualify for admission the summer prior to their junior year must have a GPA of 2.7 or better, passing scores on the CBEST, a documented field experience, and a completed program application.

Additional Requirements for Subject Matter Preparation Certification. Certification of subject matter competency by the liberal studies program requires completion of all CSET-aligned courses with grades of C (2.0) or better and cumulative GPA of 2.7 or better. If a course is repeated, the highest grade will count. (See Policies and Procedures for CSET Waiver available on program website.)

Preparation for the Major. Complete 46 units of lower division core and Exercise and Nutritional Sciences 241A, 241B (complete with a grade of $C$ (2.0) or better); Mathematics 211 (complete with a grade of C (2.0) or better); Mathematics Education 212 (2 units) (complete with a grade of C (2.0) or better); Music 102; Natural Science 100; Teacher Education 280. Exercise and Nutritional Sciences 241A, 241B and Mathematics 211 may not be taken for credit/ no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). (60 units)

Lower Division Core (46 units):
Refer to requirements listed in the major. The ITEP-MS emphasis will replace Area II.C. with the following:
C. Humanities ( 12 units ITEP)

1. Literature: English 220 (3 units).
2. Visual and Performing Arts: Art 157, Theatre 100 (6 units).
3. History: History 100 (3 units).

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Proficiency Assessment with a score of 8 or above or with a grade of C (2.0) or better in Rhetoric and Writing Studies 280 or 281 [or Linguistics 281] before taking English 306W and earn a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. All liberal studies majors are required to complete the international experience requirement.

Major including required focus and option (71 units).
Upper Division Core (44 units):
Liberal Studies (9 units): Education 451; Liberal Studies 300; Special Education 450.
Scientific Inquiry and Quantitative Reasoning (10 units): Mathematics 312*, 313*; Physics 412.
Arts and Humanities (12 units): Art 387; English 306A, 306W; Music 343.
Social Sciences (12 units): History 411, 413; Linguistics 420, 452.
International Experience (1 unit): Education 450 (1 unit)
Emphasis - ITEP (27 units): Education 970 (1 unit)**; Teacher Education 910A (3 units), 910B (3 units), 910C (3 units), 930 (6 units), 960 (2 units), 965 (9 units).
*Students must pass the Liberal Studies Mathematics Proficiency Assessment prior to registering in Mathematics 312 and 313.
${ }^{* *}$ Education 970 is the equivalent of Liberal Studies 498.

## Emphasis in Mathematics

(SIMS Code: 331923)
Preparation for the Major. Complete 46-47 units of lower division core and Exercise and Nutritional Sciences 241A, 241B (complete with a grade of C [2.0] or better); Mathematics 211 (complete with a grade of C[2.0] or better); Mathematics Education 212; Music 102; Natural Science 100 or Chemistry 308 [SDSU Imperial Valley only]. Exercise and Nutritional Sciences 241A, 241B and Mathematics 211 may not be taken for credit/no credit (Cr/NC). (59-60 units)

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above or with a grade of $C(2.0)$ or better in Rhetoric and Writing Studies 280 or 281 [or Linguistics 281] before taking English 306W and earn a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.
International Experience. All liberal studies majors are required to complete the international experience requirement.

Major including required focus and option (50.5-51 units).
Upper Division Core (40.5-41 units): [NOTE: Plus additional lower division units]
Liberal Studies: Liberal Studies 300, 498 (0.5-1 unit);
Mathematics and Science: Mathematics $312^{(1)}$, $313^{(1)}$; Physics 412; Social and Behavioral Sciences: Linguistics 420, 452;
Humanities: Art 387, Education 451, English 306A, 306W; History 411, 413; Music 343.
Mathematics Focus (9 units): Mathematics 141, 302, 413.
Mathematics Option (11 units): [NOTE: Lower and upper division units].
Mathematics 120, 303, 341 (1 unit); Teacher Education 211A (1 unit); three units selected from Linguistics $253{ }^{(2)}$ [or Rhetoric and Writing Studies $253^{(2)}$ ], Statistics 119 or 250.

[^16]
## Emphasis in Science

(SIMS Code: 331924)
Preparation for the Major. Complete 46-47 units of lower division core and Exercise and Nutritional Sciences 241A, 241B (complete with a grade of C [2.0] or better); Mathematics 211 (complete with a grade of C [2.0] or better); Mathematics Education 212; Music 102; Natural Science 100 or Chemistry 308 [SDSU Imperial Valley only]. Exercise and Nutritional Sciences 241A, 241B and Mathematics 211 may not be taken for credit/no credit (Cr/NC). (59-60 units)

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above or with a grade of $C(2.0)$ or better in Rhetoric and Writing Studies 280 or 281 [or Linguistics 281] before taking English 306W and earn a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. All liberal studies majors are required to complete the international experience requirements.

Major including required focus and option. (44.5-45) ${ }^{(1)}$
Upper Division Core (40.5-41 units): [NOTE: Plus additional lower division units]
Liberal Studies: Liberal Studies 300, 498 (0.5-1 unit);
Mathematics and Science: Mathematics $312^{(2)}$, $313^{(2) ;}$; Physics 412; Social and Behavioral Sciences: Linguistics 420, 452;
Humanities: Art 387, Education 451, English 306A, 306W; History 411, 413; Music 343.
Science Focus (9 units): [NOTE: Lower and upper division units]. Biology 101 and 101L (4 units); Geological Sciences 412 (4 units); Teacher Education 211B (1 unit).
Science Option (11-13 units): [NOTE: Lower division units]. Chemistry 100; Physics 180A; Physics 182A or an alternative course selected with approval of adviser, three to five units selected from Linguistics $253{ }^{33}$ [or Rhetoric and Writing Studies $253{ }^{(3)}$, Chemistry 130, $200{ }^{44}$.
${ }^{(1)}$ Students who select Biology 101 and 101L - consult with a Liberal Studies adviser.
${ }^{(2)}$ Students must pass the Liberal Studies Mathematics Proficiency Assessment prior to enrolling in Mathematics 312 and 313.
${ }^{(3)}$ Verify with a liberal studies adviser
${ }^{(4)}$ Required for Foundational Level General Science certification. A portfolio assessment is also required. See science adviser.

## Courses (LIB S)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSE

## LIB S 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)

## LIB S 300. Introduction to Liberal Studies (3)

Prerequisites: Education 200 and preparation for the major completed or to be completed concurrently.

Introduction to ideas, structures, and values within and among the various disciplines in this interdisciplinary major. Exploration of issues of diversity in contemporary society through directed field experience and required readings. Individual qualitative evaluation process required by major included.

## LIB S 351. International Experience-Mexicali (1) $\mathrm{Cr} / \mathrm{NC}$

(Offered only through SDSU Global Campus)
Prerequisite: Completion of the General Education requirement in Communication and Critical Thinking I.3., Critical Thinking.

International experience in Mexicali, Mexico. History and culture of region, microcredit businesses to include bee keeping, border issues, education in Baja California. Service learning project.

## LIB S 498. Assessment in Liberal Studies (0.5-1) Cr/NC

Prerequisites: Senior standing and Liberal Studies 300. Not open to premajors.

Senior assessment including reflections upon educational experiences in each subject area and role as future educator. Students will explore differences between subject areas and reflect upon learning and teaching.

## LIB S 499. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

OFFICE: Storm Hall West 214
TELEPHONE: 619-594-5268 / FAX: 619-594-4877
WEBSITE: http://linguistics.sdsu.edu

## Faculty

Emeritus: Bar-Lev, Choi, Donahue, Frey, Higurashi, Johns, Kaplan, Osman, Poole, Robinson, Seright, Webb
Chair: Samraj
Professors: Csomay, Gawron, Malouf, Samraj, Wu, Zhang
Associate Professors: Keating, Kitajima
Assistant Professors: Dinkin, Doyle, Soulaimani
Lecturers: Egipto, Justice
Offered by the Department of Linguistics
and Asian/Middle Eastern Languages
Master of Arts degree in linguistics.
Major in linguistics with the B.A. degree
in liberal arts and sciences.
Minor in linguistics.
Minor in teaching English as a second or foreign language (TESL/TEFL).
Minor in text analytics.
Certificate in computational linguistics.
Certificate in teaching English as a second or foreign language (TESL/TEFL), basic and advanced.
Certificate in text analytics.

## The Major

Linguistics is the scientific study of language. The structure of a wide variety of languages is looked at, not to learn these languages, but to learn about them in order to understand the universal properties of human language.

The linguistics program offers coursework in all areas of linguistic analysis: the core areas of phonology, syntax, semantics, and historical linguistics; and interdisciplinary areas such as applied linguistics, sociolinguistics, psycholinguistics, bilingualism, computational linguistics, and the linguistics of certain languages and language families.

Linguistics majors must complete a minor in another field approved by the adviser in linguistics. Recommended fields include anthropology, communication, ethnic studies, a foreign language, history, journalism and media studies, literature, philosophy, psychology, public affairs, sociology, and speech, language, and hearing sciences.

In addition to the major and minor programs, the Department of Linguistics and Asian/Middle Eastern Languages offers three basic certificate programs. The Basic Certificates in Computational Linguistics and Text Analytics prepare students for employment as computational linguists in commercial and government settings. The Basic Certificate in Teaching English as a Second or Foreign Language (TESL/TEFL) prepares students to teach English as a second language in adult and private schools and to teach English in foreign countries.

Employment opportunities for linguistics majors exist in the teaching of English as a second language to immigrant and refugee population groups in various locales throughout the southwestern United States. In addition, many students are interested in teaching English in Latin America, the Far East, or other areas outside the United States and continental Europe. Linguistics training can also be used as a valuable skill in conjunction with a California teaching credential in another field. Employment opportunities are growing in academic and industrial areas of computational linguistics that specialize in language processing to include information extraction from legal documents or health records and marketing analyses based on social media texts. Government work is another alternative, where such divisions as the State Department and the foreign service hire trained linguists. Researchers are needed at institutes working in the fields of animal communication, computer science development, disorders of communication, or advanced research in linguistics theory. By combining a linguistics major with
courses in accounting, business administration, or related fields, there are jobs available with multinational corporations, particularly those which emphasize trade among the Pacific rim nations. Linguists are also hired in such fields as computer science, advertising, communication media, public relations, and curriculum development.

With a master's or doctoral degree, linguistics majors may find teaching positions at community colleges or universities.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Impacted Program

The linguistics major is an impacted program. To be admitted to the linguistics major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Linguistics Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 15051) (SIMS Code: 114701)
All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in linguistics courses can apply to the degree.

Students majoring in linguistics must complete a minor in another field approved by the departmental adviser in linguistics. Recommended fields include anthropology, communication, ethnic studies, a foreign language, history, journalism and media studies, literature, philosophy, psychology, public affairs, rhetoric and writing studies, and sociology.

Preparation for the Major. Linguistics 101 and one course selected from Linguistics 270, Economics 201, Philosophy 120, Political Science 201, Psychology 280, Sociology 201, Statistics 119, or 250. (6-7 units)

Students should note that a number of the upper division required and recommended courses listed below have lower division prerequisites, but these prerequisites do not constitute requirements per se for the completion of the major.

Language Requirement. Competency equivalent to that which is normally attained through three college semesters of a foreign language with a $C(2.0)$ average, or the equivalent. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or Linguistics 305 W , or Rhetoric and Writing Studies 305W or 500W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 27 upper division units to include at least 21 units in linguistics (and those 21 must include Linguistics 420 or 501; 521, 522, and 525; and cannot include more than nine units from 300-level courses); with the approval of the adviser, up to six units may be selected from related fields. Linguistics 305W may not be applied to the major.

## Linguistics Minor

(Minor Code: 15051) (SIMS Code: 114701)
The minor in linguistics consists of a minimum of 15 units, 12 of which must be upper division and at least 12 of which must be linguistics courses selected under the guidance and with the approval of the adviser. Linguistics 101 or 420 or 501 is required. Linguistics 100B, 200, and 305W may not be applied to the minor. No more than three units may be applied to the minor from Anthropology 410, Communication 465, Philosophy 534, Spanish 448.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Teaching English as a Second or Foreign Language (TESL/TEFL) Minor

(Minor Code: 15051) (SIMS Code: 114707)
The minor in teaching English as a second or foreign language consists of a minimum of 15 units to include Linguistics 420 or 501; Linguistics 430 or 530 or 551 ; Linguistics 452 or 454 or 552 ; Linguistics 550; Linguistics 555 or 556 . Students must also complete 15 hours of ESL tutoring.

Courses in the minor may not be counted toward the linguistics major or the TESL/TEFL certificate, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Text Analytics Minor

## (Minor Code: 15051) (SIMS Code: 114709)

The minor in text analytics consists of a minimum of 15 units to include Linguistics 571 or 572 [or Big Data Analytics 572], Statistics 550 or 551A, Linguistics 581 [or Computer Science 581], 583, and completion of one of the following: Linguistics 551, Biology 568 [or Bioinformatics and Medical Informatics 568], Computer Science 550 , or Statistics 520 . For Statistics 550 and 551A, students must satisfy lower division calculus and linear algebra prerequisites (Mathematics 151, 252, and 254).

Courses in the minor may not be counted toward the major. A minimum of six upper division units must be completed in residence at San Diego State University.

## Computational Linguistics Basic Certificate (SIMS Code: 114787)

The Department of Linguistics and Asian/Middle Eastern Languages offers a basic Certificate in Computational Linguistics. The certificate requires 12 units to include:
Introductory Linguistics: Linguistics 420 or 501;
Scripting and Linguistic Databases (corpora): Linguistics 571;
Introduction to Computational Linguistics: Linguistics 581 [or Computer Science 581];
Mathematical Tools: Linguistics 572 [or Big Data Analytics 572].
Students must obtain a grade of $C$ (2.0) or better in each of the certificate courses. Under certain circumstances comparable courses taken at other institutions may count toward the certificate. Such courses must be evaluated and approved by the certificate adviser. In order to enroll, students must contact the certificate adviser in the Department of Linguistics and Asian/Middle Eastern Languages. Courses in the certificate may count toward the major in linguistics or the major in liberal studies (including the linguistics specialization) but may not count toward the minor in linguistics.

## Teaching English as a Second or Foreign Language (TESL/TEFL) Basic Certificate

## (SIMS Code: 114786)

The Department of Linguistics and Asian/Middle Eastern Languages offers a basic and advanced Certificate in Teaching English as a Second or Foreign Language (TESL/TEFL). The basic certificate requires 15 units to include:
Introductory Linguistics: Linguistics 420 or 501;
Language Acquisition: Linguistics 452 or 454, or 552;
ESL Teaching: Linguistics 550;
Practical Issues/Computer Assisted Language Learning: Linguistics 555 or 556;
Elective: Linguistics 430 or 530 or 551.
Students must obtain a grade of $C$ (2.0) or better in each of the certificate courses. Under certain circumstances comparable courses taken at other institutions may count toward the certificate. Such courses must be evaluated and approved by the certificate adviser. In addition, there is a 15 -hour tutoring requirement. In order to enroll, you must contact the certificate adviser in the Department of Linguistics and Asian/Middle Eastern Languages. Courses in the certificate may count toward the major in linguistics, the major in English, or the major in liberal studies (including the linguistics specialization) but may not count toward the minor in linguistics or the minor in Teaching English as a Second or Foreign Language (TESL/TEFL).

Refer to the Graduate Bulletin for information on the advanced certificate.

## Text Analytics Basic Certificate <br> (SIMS Code: 114781)

The Department of Linguistics and Asian/Middle Eastern Languages offers a basic certificate in text analytics. The certificate requires a minimum of 12 units to include Linguistics 571 or 572 [or Big Data Analytics 572]; Statistics 550 or 551A, Linguistics 581 and 583. For Statistics 550 and 551A, students must satisfy lower division calculus or linear algebra prerequisites (Mathematics 151, 252, and 254).

Students must obtain a grade of $C$ (2.0) or better in each of the certificate courses. Under certain circumstances, comparable courses taken at other institutions may count toward the certificate. Such courses must be evaluated and approved by the certificate adviser. In order to enroll, students must contact the certificate adviser in the Department of Linguistics and Asian/Middle Eastern Languages. Courses in the certificate may count toward the major in linguistics or the major in statistics but may not count toward the minor in linguistics or the minor in text analytics.

## Courses (LING)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

LING 100A. English Composition for International Students and English Learners I (3)
Prerequisite: Open to international students or other students whose first language is not English and who have not satisfied the SDSU Written Communication Assessment requirement.

Introduction to college-level writing for language/grammar needs of first-semester English learners. Understanding written argument, comprehension of college-level academic texts, and integrating ideas and information from multiple text sources in formal written papers. Not open to native speakers of English.
LING 100B. English Composition for International Students and English Learners II (3) [GE]
Prerequisite: Linguistics 100A with a grade of C- (1.7) or better.
College-level writing; attention to language needs of advanced English learners. Written argument, comprehension and analysis of college-level academic texts, and use of multiple text sources for written synthesis and argument. Not open to native speakers of English. Not open to students with credit in a higher-numbered composition course or Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Rhetoric and Writing Studies 100 [or English 100] or 105B. (Formerly numbered Linguistics 100.)

LING 101. Introduction to Language (3) [GE]
The nature of language. Sound, meaning, and grammar. Language history and change. Dialects and variation. Language acquisition. Animal communication. Language and the brain. Not open to students with credit in upper division linguistics courses, excluding Linguistics 305W.
LING 200. Advanced English for International Students (3) [GE]
Prerequisites: Satisfaction of the SDSU Written Communication Assessment requirement; and Linguistics 100B. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Further practice in mastering conventions of standard academic writing, with emphasis on strategies for research in writing papers. Focus on language issues specific to non-native speakers of English. Not open to students with credit in Africana Studies 200, American Indian Studies 225, Chicana and Chicano Studies 200, or Rhetoric and Writing Studies 200 [or English 200].
LING 243. Invented Languages - Klingon and Beyond! (3) [GE]
Prerequisite: Rhetoric and Writing Studies 100.
Invented languages such as Klingon and Esperanto are the medium for engaging linguistic theory and diversity. The art, ideas, and goals behind invented languages will be explored using diverse current and historical sources from literature, the Internet, film, and video games.

## LING 250. Directed Language Study (1-4)

Prerequisite: Consent of instructor.
Directed independent study of a foreign language (excluding languages taught in other departments) with aim of acquiring a developing competency in the language. May include speaking, listening, reading, writing, and grammar. May be repeated with approval of undergraduate adviser. Maximum credit eight units.

## LING 251. Dialects of English (3) [GE]

Regional and social diversity of English dialects in the United States and elsewhere to include differences in grammar, pronunciation, and vocabulary.
LING 252. Language Across the Lifespan (3) [GE]
Cognitive benefits of bilingualism. Effect of normal and pathological aging on language knowledge and use. Language learning in cognitively impaired individuals. Native and second language acquisition and use in childhood and adulthood. Sociological factors affecting language use.

## LING 253. Grammar and Usage for Writers (3)

(Same course as Rhetoric and Writing Studies 253)
Prerequisite: Satisfaction of the SDSU Written Communication Assessment requirement.

Instruction in sentence structure with attention to integrating sentences into their logical and rhetorical contexts. Identifying and understanding source of sentence-level writing problems.
LING 270. Elementary Statistics for Language Studies (3) [GE] Introductory statistics and probability using language data to illustrate statistical ideas and facilitate analyses of quantitative language data. Measures of central tendency and dispersion, correlation, mixed models, regression, and significance. Probabilistic explanation in linguistics. Students with credit or concurrent registration in the following lower division statistics courses will be awarded a total of four units for two (or more) courses: Linguistics 270, Administration, Rehabilitation and Postsecondary Education 201, Biology 215, Civil Engineering 160, Economics 201, Political Science 201, Psychology 280, Sociology 201, Statistics 119, 250.
LING 281. Academic Reading and Writing for Second Language Learners and International Students (3)
(Same course as Rhetoric and Writing Studies 281)
Prerequisite: Open only to students who qualify for Rhetoric and Writing Studies 280 and whose first language is not English.

Academic prose, emphasizing purposes, structures, and styles of academic English writing. Designed to improve students' ability to plan, draft, revise, and edit essays, as well as to read and analyze complex academic texts. Additional emphasis on grammatical features of English relevant to the second language population.

## LING 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## LING 299. Special Study (1-4)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Intended for Undergraduates)

## LING 305W. Advanced Composition for International

Students (3)
Prerequisites: Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a grade of C (2.0) or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Advanced expository writing, with practice in the various associated skills (organization, research, presentation, rhetoric). The goal is to enable non-native English speakers to function completely with written English on advanced university levels. This course may not be used toward the major or minor in linguistics.

## LING 350. Language and Politics (3) [GE]

Linguistics devices used to persuade in politics. Differences between what is literally said and what is actually conveyed in political discourse. How political speakers and writers use grammar, sound structure, and vocabulary to persuade.
LING 352. Language and Advertising (3)
Linguistic devices used to persuade in advertising. Differences between what is literally said and what is actually conveyed in advertisements. How advertisers use the grammar, sound structure, and vocabulary of languages (especially English) to persuade audiences.
LING 354. Language and Computers (3) [GE]
Computers, computer programming languages, and "artificial intelligence" viewed from perspective of human language.

## LING 363. Sociocultural Analysis of Black Languages (3) [ES]

(Same course as Africana Studies 363)
Social and cultural functions of Black languages, verbal and nonverbal, in Afro-American life, and their profound impact on larger society. Also, a probe into issues concerning validity of Black English.

## LING 420. Linguistics and English (3) [GE]

Introduction to sound and grammatical structure of language, with special attention to English. Language acquisition and variation. Of special interest to prospective teachers. Not open to students with credit in Linguistics 501.

## LING 430. English Grammar for Prospective Teachers (3)

Prerequisites: Linguistics 101 or 420 and upper division standing.
Core grammatical concepts and facts of English grammar. Parts of speech; grammatical relations; word, sentence, discourse structure. Focus on standard written English. Of special interest to prospective secondary school teachers.

## LING 452. Language Acquisition (3) [GE]

Prerequisite: Linguistics 420.
Principles of child language development. Sounds and grammar in speech of young children. Acquisition of reading and vocabulary. Relationship between cognitive development and language. Development of language in bilinguals. Second language acquisition.

## LING 454. Second Language Acquisition (3) [GE]

Prerequisite: Linguistics 101 or 420.
Basic theory and research in second language acquisition. Nature of interlanguage in second language learning. Influence of native language transfer, interaction, sociocultural factors on second language acquisition. Applications of second language research to teaching.

LING 457. Community-Based Language Fieldwork (1)
Two hours of activity.
Prerequisite: Concurrent registration in upper division course requiring term paper on language behavior (e.g. Linguistics 452).

Fieldwork in language use in community setting. Students observe, keep field notes, analyze language behavior (e.g. speaking, reading, writing, listening).
LING 460. American Indian Languages (3) [GE-ES]
(Same course as American Indian Studies 460 and Anthropology 460)
Structures of American Indian languages. Language families of North America, history, and present circumstances. Interdependence of language and culture, differences in ways of speaking. Issues of language endangerment, language death, language maintenance, and language revitalization.

## LING 496. Experimental Topics in Linguistics (1-4)

Specialized study of a selected topic in linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296,496,596 courses applicable to a bachelor's degree. Maximum credit six units.

## LING 499. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
LING 501. Fundamentals of Linguistics (3)
Prerequisite: Upper division standing.
Principles of modern linguistics, with attention to English phonetics, phonology, morphology, syntax, semantics and pragmatics; universals and typology.

## LING 502. Language in Mind and Society (3)

Prerequisite: Linguistics 501. Proof of completion of prerequisite required: Copy of transcript.

Child language acquisition, adult language production/comprehension and sociolinguistics. Dialects, language variation, and standardization. Bilingualism and language change.

## LING 503. Functions of Language (3)

Prerequisite: Linguistics 501. Proof of completion of prerequisite required: Copy of transcript.

Empirical methods in linguistics. Phonological structure of English and other languages. Functional and discourse related approaches to language patterns. Connections between morphosyntactic concepts and functional/discourse concepts to conduct text analysis.

## LING 505. Writing for Graduate Students (3)

Prerequisite: Conditional or classified admission to an SDSU graduate program or undergraduates with consent of instructor.

Conventions of scholarly writing appropriate for student papers, theses, or academic journal articles. Development of research questions and literature reviews as appropriate for students' disciplines. Revision of current or previous course papers according to disciplinary conventions.

## LING 521. Phonology (3)

Prerequisite: Linguistics 420 or 501.
Theoretical principles of transformational-generative phonology.

## LING 522. Syntax (3)

Prerequisite: Linguistics 420 or 501.
Theoretical principles of transformational-generative syntax.

## LING 523. Morphology (3)

Prerequisite: Linguistics 420 or 501.
Theoretical principles of words structure, including inflection, derivation, and compounding; organization of the lexicon; structure of inflectional paradigms; morphophonological and morphosyntactic alterations; and computational applications.

## LING 525. Semantics and Pragmatics (3)

Prerequisite: Linguistics 420 or 501.
Advanced semantic theory; systematic analysis of the interaction of sequences of language with real world context in which they are used.

LING 526. Discourse Analysis (3)
Prerequisite: Linguistics 420 or 501.
Theories of discourse structure. Text and context. Frameworks for analyzing written and spoken discourses such as genre analysis, conversation analysis, critical discourse analysis, discourse and grammar, speech act theory, and corpus linguistics. Applications of discourse analysis such as cross-cultural misunderstanding.

## LING 530. English Grammar (3)

Prerequisites: Six upper division units in linguistics.
English morphology, syntax, and discourse structure, including simple and complex sentence structure; lexical categories and subcategories; discourse functions of selected constructions. Problems and solutions in teaching English grammar.
LING 550. Theory and Practice of English as a Second Language (3)
Prerequisite: Linguistics 101, 420, or 501.
The nature of language learning; evaluation of techniques and materials for the teaching of English as a second language.

## LING 551. Sociolinguistics (3)

Prerequisite: A course in introductory linguistics.
Investigation of the correlation of social structure and linguistic behavior.

## LING 552. Psycholinguistics (3)

Prerequisite: Linguistics 420 or 501.
Psychological and mental processes related to comprehension, production, perception, and acquisition of language in adults and children.

## LING 553. Bilingualism (3)

Prerequisite: Linguistics 420 or 501.
Bilingualism in society and in schools. Cognition, language processing, and representation in bilinguals. Research methods in the study of bilingualism.
LING 555. Practical Issues in Teaching English as a Second Language (3)
Prerequisite: Credit or concurrent registration in Linguistics 550.
Practical approaches to applications of the theory of English as a Second Language (ESL) and methodology for speaking, reading, listening, writing; techniques for facilitating growth of communicative competence.

## LING 556. Computer Assisted Language Learning and

Teaching (3)
Prerequisite: Credit or concurrent registration in Linguistics 550.
Theory and practice of computer assisted language learning and language teaching. Hands-on experience with pedagogical aspects of using technology in the language classroom.

## LING 571. Computational Corpus Linguistics (3)

Prerequisite: Upper division standing.
Practical introduction to computation with text corpora and introduction to Python. Tokenizing, part-of-speech tagging, and lemmatizing (stemming) large corpora. Writing of Python programs required.
LING 572. Python Scripting for Social Science (3)
(Same course as Big Data Analytics 572)
Prerequisite: Upper division or graduate standing
Python scripting for social science data. Statements and expressions. Strings, lists, dictionaries, files. Python with unformatted data (regular expressions). Graphs and social networks. Spatial data and simple GIS scripts.
LING 581. Computational Linguistics (3)
(Same course as Computer Science 581)
Prerequisite: Linguistics 571 or 572 [or Big Data Analytics 572] or Computer Science 320.

Basic concepts in computational linguistics including regular expressions, finite-state automata, finite-state transducers, weighted finite-state automata, and n-gram language models. Applications to phonology, orthography, morphology, syntax. Probabilistic models. Statistical techniques for speech recognition.

LING 583. Statistical Methods in Text Analysis (3)
Prerequisites: Linguistics 571 or 572 [or Big Data Analytics 572]; and Statistics 550 or 551A.

Statistical methods for analysis of large texts to include Bayesian classifiers, Markov models, maximum entropy models, neural nets, and support vector machines. Data collection and annotation. Applications to annotation, relation detection, sentiment analysis, and topic modeling.

## LING 596. Selected Topics in Linguistics (1-3)

Prerequisite: Upper division standing.
Advanced study of selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

## Management

## In the Fowler College of Business

OFFICE: Student Services East 3428
TELEPHONE: 619-594-5306 / FAX: 619-594-3272
WEBSITE: https://business.sdsu.edu/management
A Member of the AACSB International-The Association to Advance Collegiate Schools of Business

## Faculty

Emeritus: Atchison, Belasco, Brady, Butler, Dunn, Ehrlich, Hampton, Hergert, Naughton, Rhyne, Robbins, Singh, Shore, Wright
Chair: Sundaramurthy
Professors: Chung-Herrera, De Noble, Musteen, Randel, Ryan, Sundaramurthy
Associate Professors: Ahsan, Bernerth, Dean, Francis, Shin, Zheng
Assistant Professors: Chakravarty, Eissa, Grissom, Wiegand
Lecturers: Robbins, Sannwald, Sloan

## Offered by the Department

Master of Science degree in business administration.
Master of Science degree in global business development.
Master of Business Administration.
Major in management with the B.S. degree
in business administration.
Major in general business with the B.S. degree
in business administration. See Business Administration.
Minor in entrepreneurship.
Minor in management.

## The Major

Management is defined as the process of administering and coordinating resources in an effective and efficient manner to achieve the goals of an organization. Managers plan, organize, lead, and control:

- Planning deals with the establishment of goals;
- Organizing involves the determination of tasks to be done, who will do them, and how they will be organized;
- Leading is the function that directs members of a work group to achieve the goals of the organization; and
- Controlling involves the identification of deviations between planned and actual outcomes of the organization.
Major areas within management include international business, entrepreneurship, human resource management, and corporate governance.
- Recent studies indicate that the demand for professional managers will continue to increase. Typical careers include:
- Organization and management analysts design and evaluate strategy, structure, and culture;
- International managers supervise foreign-based manufacturing and/or marketing operations for American companies;
- Entrepreneurs start new ventures or create new ventures within an existing organization;
- Human resource management analysts/administrators function as recruiters, trainers, compensation and benefits specialists, labor relations specialists, and ethical officers for the organization;
- Top managers lead organizations and may share power and responsibility with directors, investors, and employees.


## Business Honors Program

The Business Honors Program offers excellent upper division business students the opportunity to explore issues in our local, regional, and global business environments focusing on the social and ethical responsibility that business has to the community and society. Honors students will enroll in a one unit business honors seminar each semester. During their enrollment they will participate in activities to promote their academic and personal growth, documenting their work in a written portfolio.

Generally, students should apply to this program at the time of application to upper division business. Applicants must submit an essay with their application. Applicants must have a 3.6 cumulative GPA or good standing in the Weber Honors College. Students not meeting these requirements may petition for admission to the program. Successful completion of the Business Honors Program will be recognized at graduation. Contact Dr. Robert A. Judge, Department of Management Information Systems, for more information about this program.

## Statement on Computers

Before enrolling in upper division courses in the Fowler College of Business, students must be competent in the operation of personal computers, including word processing and spreadsheets. Business students are strongly encouraged to have their own computers capable of running word processing, spreadsheet, presentation, e-mail, and Internet applications such as those found in packages sold by major software publishers. Availability of on-campus computing resources can be limited due to increasing demand across the university.

## Retention Policy

The Fowler College of Business expects that all business students will make reasonable academic progress towards the degree. Business premajors who have earned 60 units but have less than a 2.9 may be removed from the premajors and placed in undeclared. Upper division business majors earning less than a 2.0 average in their major GPA for two consecutive semesters may be removed from business and placed in undeclared.

## Transfer Credit

Lower Division: Courses clearly equivalent in scope and content to San Diego State University courses required for minors or as preparation for all business majors will be accepted from regionally accredited United States institutions and from foreign institutions recognized by San Diego State University and the Fowler College of Business.

Upper Division: It is the policy of the San Diego State University Fowler College of Business to accept upper division transfer credits where (a) the course content, requirements, and level are equivalent to San Diego State University courses and (b) where the course was taught in an AACSB International-The Association to Advance Collegiate Schools of Business accredited program. Exceptions require thorough documentation evidencing the above standards.

## Impacted Program

The management major is impacted. Before enrolling in any upper division courses in business administration, students must advance to an upper division business major and obtain a business major code. To be admitted to an upper division business major (accounting, finance, financial services, real estate, information systems, management, or marketing), students must meet the following criteria:
a. Complete with a grade of $\mathrm{C}(2.0)$ or better: Accountancy 201, 202; Economics 101, 102; Finance 240 (or an approved business law course); Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290 (RWS 290 is not required for the accounting major); and either Statistics 119 or Economics 201. These courses cannot be taken for credit/no credit (Cr/ NC);
b. Complete a minimum of 60 transferable semester units;
c. Have a cumulative GPA of 2.9.

Students who meet all requirements except the GPA may request to be placed on the waiting list. While all spaces are usually filled by eligible students, if there is room in the program after all the fully-qualified students have been accommodated,
students will be admitted from the waiting list in GPA order. Contact the Fowler Center for Student Success (EBA-448), 619-5945828, for more information.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Management Major

With the B.S. Degree in Business Administration

## (Major Code: 05061) (SIMS Code: 222557)

A minor is not required with this major.
Preparation for the Major. Complete with a grade of $\mathrm{C}(2.0)$ or better: Accountancy 201, 202; Economics 101, 102; Finance 240 (or an approved business law course); Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290; and either Statistics 119 or Economics 201. (27 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$; the minimum grade in each class is C . Additional progress requirements must be met before a student is admitted to an upper division major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. Students may elect to major in management or to complete the management major with a specialization in human resource management or entrepreneurship.

Forty-four upper division units consisting of Management 352, 357, 358, 401, 444, 475; Business Administration 300, 310, 323, 350, 360, 370, 405; Management Information Systems 301; and six units selected from Management 353, 355, 452, 455, 459, $460,461,462,463,464,467,498$. A "C" (2.0) average or better is required in the courses stipulated here for the major.

## Specialization in Entrepreneurship

## (SIMS Code: 222564)

Forty-four upper division units consisting of Management 358, 401, 444, 460, 475; Business Administration 300, 310, 323, 350, 360, 370, 405; Management Information Systems 301; and nine units selected from Management 353, 355, 452, 455, 459, 498, Journalism and Media Studies 480. A "C" (2.0) average or better is required in the courses stipulated here for the major.

## Specialization in Human Resource Management

## (SIMS Code: 222563)

Forty-four upper division units consisting of Management 352, 401, 444, 461, 462, 475; Business Administration 300, 310, 323, 350, 360, 370, 405; Management Information Systems 301; and six units selected from Management 463, 464, 466, 467, 498. A "C" (2.0) average or better is required in the courses stipulated here for the major.

## Entrepreneurship Minor

## (SIMS Code: 222565)

Admission to the minor in entrepreneurship requires completion of at least 60 units with a minimum overall GPA of 2.9 , and completion of Accountancy 201 with a grade of C (2.0) or better.

The minor in entrepreneurship consists of 15 units to include Accountancy 201*; Management 358, 460; one course selected from Management 353, 355, 452, 455, 459, Finance 328; and one or two courses selected from the following preapproved electives:

Majors in the Fowler College of Business, Hospitality and Tourism Management, and International Business select two courses from Business Administration 404, Communication 307, 371, 406, Finance 321, 328, Hospitality and Tourism Management 320, Management 352, 353, 355, 452, 455, 459, Management Information Systems 306, 383, Marketing 373, 377, 476, Recreation and Tourism Management 475.

All other majors select one course from Business Administration 323, 350, 360, 370, Communication 307, 371, 406, Finance 321, 328, Journalism and Media Studies 480, Management 352, 353, 355, 452, 455, 459, Management Information Systems 306, 383, Recreation and Tourism Management 475.

Students will be required to participate in at least one experiential component. See list of options in the Fowler Center for Student Success (EBA-448).

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University. Students with a major in the Fowler College of Business, Hospitality and Tourism Management, or International Business should choose courses carefully with an adviser in their major department and the Fowler Center for Student Success (EBA-448). The entrepreneurship minor is not open to management majors.

Students must meet the prerequisites for the minor in effect at the time they declare the minor. Before declaring the minor, students must attend an advising session with the entrepreneurship minor adviser and have the faculty sign the advising form. Contact the Fowler Center for Student Success (EBA-448) for admissions criteria and procedures.

> *Accountancy 201 waived for Business Administration, Hospitality and
> Tourism Management, and International Business majors.

## Management Minor

## (SIMS Code: 222559)

Admission to the minor in management requires completion of at least 60 units with a minimum overall GPA of 2.9 and completion of Accountancy 201 with a grade of C (2.0) or better.

For all majors outside of the Fowler College of Business, Hospitality and Tourism Management, and International Business, the minor in management consists of a minimum of 22 units to include Accountancy 201; Business Administration 300, 350; Economics 101, 102; Management 352, 357 or 358 , and 444.

For all majors in the Fowler College of Business, Hospitality and Tourism Management, and International Business, the minor in management consists of a minimum of 15 units to include Accountancy 201; Management 352, 357 or 358,444 , and one upper division course (three units) in management.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University. Students with a major in the Fowler College of Business, Hospitality and Tourism Management, or International Business should choose courses carefully with an adviser in their major department and the Fowler Center for Student Success (EBA-448).

Students must meet the prerequisites for the minor in effect at the time that they declare the minor. Contact the Fowler Center for Student Success (EBA-448) for admissions criteria and procedures.

## Courses (MGT)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSE

MGT 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

MGT 352. Human Resource Management (3)
Prerequisite: Approved upper division business major, business minor, or another major approved by the Fowler College of Business. Proof of completion of prerequisite required: Copy of transcript.

Acquisition, development, maintenance, and termination of human resources in accordance to goals of the organization.
MGT 353. Creativity and Innovation (3)
Prerequisite: Business Administration 350. Proof of completion of prerequisite required: Copy of transcript.

Managing creativity, including selling creative ideas to others, scanning for new opportunities, taking creativity to the marketplace, and creating an organizational culture for innovation.
MGT 355. International Entrepreneurship (3)
Prerequisite: Approved upper division business major, business minor, or another major approved by the Fowler College of Business. Proof of completion of prerequisite required: Copy of transcript.

Launching and managing an international entrepreneurial venture. Search and identification of opportunities in foreign markets, logistics of international business expansion, cross-cultural business communication, and international networking.

## MGT 357. Multinational Business and Comparative

Management (3)
Prerequisite: Business Administration 350. Proof of completion of prerequisite required: Copy of transcript.

Context of international business, environment, institutions, and business practices. Cultural awareness, sensitivity, interpersonal, and leadership skills needed in an international context.

## MGT 358. Fundamentals of Entrepreneurship (3)

Prerequisite: Approved upper division business major, business minor, or another major approved by the Fowler College of Business. Proof of completion of prerequisite required: Copy of transcript.

Process of initiating, expanding, purchasing, and consolidating businesses. Concepts, theories, and techniques of managerial innovation and implementation.

## MGT 401. Business Internship (3) $\mathrm{Cr} / \mathrm{NC}$

Prerequisites: Business Administration 350 and consent of faculty adviser. Proof of completion of prerequisites required: Copy of transcript.

Internship with business firms, nonprofit organizations, or government agencies. Work done under joint supervision of intern organization and course instructor.

## MGT 434. Business Negotiation (3)

Prerequisite: Business Administration 350.
Origins and strategies of abstract and theoretical approaches to bargaining and negotiation in business situations faced by managers and leaders.
MGT 444. Business Ethics and Corporate Governance (3)
Prerequisites: Business Administration 300, 350. Proof of completion of prerequisites required: Copy of transcript.

Corporate social responsibility, stakeholder theory, morality of capitalism, and corporate governance. Ethical theory and its application to ongoing issues and current events within the business context.

MGT 452. Family Business Management (3)
Prerequisite: Management 358. Proof of completion of prerequisite required: Copy of transcript.

Managing a family owned business. Succession planning, governance, strategy and family dynamics of mixing family and business roles, non-family employees, and culture.
MGT 455. Social Entrepreneurship (3)
Prerequisite: Management 358 . Proof of completion of prerequisite required: Copy of transcript.

Entrepreneurial skills to craft innovative responses to social needs. Social mission, launching and building a social venture and developing social returns to an enterprise.
MGT 459. Franchise Management (3)
Prerequisite: Management 358. Proof of completion of prerequisite required: Copy of transcript.

Franchising presented as a viable alternative path to entrepreneurship. Nature and role of franchisor and franchisee including challenges of becoming a franchisee of an existing system and of becoming a franchisor.
MGT 460. Business Plan Development (3)
Prerequisite: Management 358. Proof of completion of prerequisite required: Copy of transcript.

Core concepts and key elements of producing a business plan for a new entrepreneurial venture or for new business opportunity within an existing organization.
MGT 461. Human Resource Selection (3)
Prerequisite: Management 352. Proof of completion of prerequisite required: Copy of transcript.

Employee selection and placement issues in organizations including strategic, legal, and measurement issues. Roles of recruitment, job analysis, and human resource planning in human resource selection process.
MGT 462. Compensation (3)
Prerequisite: Management 352. Proof of completion of prerequisite required: Copy of transcript.

Wage and salary administration in organizations. Determinants of general wage and salary levels and structures. Total compensation systems, interrelationship among employee performance, intrinsic and extrinsic rewards, pay equity, and employee pay satisfaction.

## MGT 463. Performance Management (3)

Prerequisite: Management 352. Proof of completion of prerequisite required: Copy of transcript.

Definition, measurement, and evaluation of employee performance, development of employee skills, and implementation of a performance management system.
MGT 464. Legal Issues in Managing Employees (3)
Prerequisite: Management 352. Proof of completion of prerequisite required: Copy of transcript.

Statutes, case law, and legal issues relevant to managers, including recruitment, hiring, wages and hours, discrimination, sexual harassment, occupational safety and health, firing and post-termination. Focus on California and federal laws that managers need to know.
MGT 466. International Human Resource Management (3)
Prerequisite: Management 352. Proof of completion of prerequisite required: Copy of transcript.

Human resource issue facing multinational corporations including staffing, training and development, performance management, expatriation and repatriation, and compensation.
MGT 467. Diversity Issues (3)
Prerequisite: Management 352. Proof of completion of prerequisite required: Copy of transcript.

Managing employees in a diverse workforce. Policy development for managing diversity. Legal issues in diversity.

MGT 475. Leadership in Organizations (3)
Prerequisite: Business Administration 350. Proof of completion of prerequisite required: Copy of transcript.

Leadership, communicating vision, initiating changes and innovation, and developing leadership competencies through self-assessment.

## MGT 496. Selected Topics in Management (1-4)

Prerequisite: Consent of department chair.
Selected areas of concern in management. See Class Schedule for specific content. May be repeated with new content with consent of department chair. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

## MGT 498. Investigation and Report (1-3)

Prerequisites: Senior standing and consent of instructor.
A comprehensive and original study of a problem connected with management under the direction of one or more members of the management staff. May be repeated with new content. Maximum credit six units.

## MGT 499. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSE

(Also Acceptable for Advanced Degrees)
MGT 596. Advanced Topics in Management (3)
Prerequisites: Six upper division units in management. Proof of completion of prerequisites required: Copy of transcript.

Advanced special topics in management. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

# Management Information Systems 

In the Fowler College of Business

OFFICE: Student Services East 2411
TELEPHONE: 619-594-5316 / FAX: 619-594-3675
WEBSITE: https://business.sdsu.edu/MIS
A Member of AACSB International-The Association to Advance Collegiate Schools of Business.

## Faculty

Emeritus: Addo, Beatty, Easton, A., Easton, G., Feeney, Flatley, Hatch, Koster, Lackritz, Langenbach, Lyons-Lawrence, Norman, Penrose, Plice, Sherrard, Vik
Chair: Yang (Interim)
Professors: Briggs, Jennex, Raafat, Reinig, Shin, Yang
Associate Professor: Elkins
Assistant Professors: Abhari, K., Goldberg, Huangfu, Liu
Lecturers: Abhari, M., Judge, O’Byrne, Probett, Shaul, Showghi, Tyler

## Offered by the Department

Master of Business Administration.
Master of Science degree in business administration.
Master of Science degree in cybersecurity management.
Master of Science degree in information systems.
Major in information systems with the
B.S. degree in business administration.

Major in general business with the B.S. degree in business administration. See Business Administration.
Minor in information systems.
Certificate in data analytics (refer to the Graduate Bulletin).

## The Major

Good business decisions require good information. The purpose of an information system is to provide management with the information that is essential to decision making and to assist in interpreting that information.

Information Systems. Students interested in using computers to solve business problems and in devising new and more efficient solutions should consider a major in information systems. The major is intended to prepare students for their first job in information systems, which is normally as a systems analyst. The systems analyst studies problems, designs solutions, and implements those solutions using computer hardware and software. The major will also prepare students for continued growth as a manager in information systems.

The employment outlook for information systems specialists is currently very good. Positive projections continue into the future. Many graduates who major in information systems assume the following positions: systems analysts plan the activities necessary to solve a business problem by structuring the problem in logical form, identifying the data needed, and specifying the procedures to be followed in programming the data processing; information systems specialists represent various departments of a business in assuring that each department's information processing needs are provided for effectively and efficiently; programmers and analysts plan and write computer programs to process business information; computer center managers direct the work of information processing in a company; and technical marketing specialists sell and coordinate the installation of computer systems.

Typical places of employment for information systems graduates include large businesses, government agencies, computer manufacturers, universities, and independent computer service organizations.

## Business Honors Program

The Business Honors Program offers excellent upper division business students the opportunity to explore issues in our local, regional, and global business environments focusing on the social and ethical responsibility that business has to the community and society. Honors students will enroll in a one unit business honors seminar each semester. During their enrollment they will participate in activities to promote their academic and personal growth, documenting their work in a written portfolio.

Generally, students should apply to this program at the time of application to upper division business. Applicants must submit an essay with their application. Applicants must have a 3.6 cumulative GPA or good standing in the Weber Honors College. Students not meeting these requirements may petition for admission to the program. Successful completion of the Business Honors Program will be recognized at graduation. Contact Dr. Robert A. Judge, Department of Management Information Systems, for more information about this program.

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## Retention Policy

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## Transfer Credit

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Upper Division: It is the policy of the San Diego State University Fowler College of Business to accept upper division transfer credits where (a) the course content, requirements, and level are equivalent to San Diego State University courses and (b) where the course was taught in an AACSB International-The Association to Advance Collegiate Schools of Business-accredited program. Exceptions require thorough documentation evidencing the above standards.

## Impacted Program

The information systems major is impacted. Before enrolling in any upper division courses in business administration, students must advance to an upper division business major and obtain a business major code. To be admitted to an upper division business major (accounting, finance, financial services, real estate, information systems, management, or marketing), students must meet the following criteria:
a. Complete with a grade of $C(2.0)$ or better: Accountancy 201, 202; Economics 101, 102; Finance 240 (or an approved business law course); Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290 (RWS 290 is not required for the accounting major); and either Statistics 119 or Economics 201. These courses cannot be taken for credit/no credit (Cr/ NC);
b. Complete a minimum of 60 transferable semester units;
c. Have a cumulative GPA of 2.9.

Students who meet all requirements except the GPA may request to be placed on the waiting list. While all spaces are usually filled by eligible students, if there is room in the program after all the fully-qualified students have been accommodated,
students will be admitted from the waiting list in GPA order. Contact the Fowler Center for Student Success (EBA-448), 619-5945828, for more information.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Information Systems Major

With the B.S. Degree in Business Administration
(Major Code: 07021) (SIMS Code: 222336)
A minor is not required with this major.
Preparation for the Major. Complete with a grade of C (2.0) or better: Management Information Systems 180; Accountancy 201, 202; Economics 101, 102; Finance 240 (or an approved business law course); Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290; and either Statistics 119 or Economics 201. (27 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$; the minimum grade in each class is C . Additional progress requirements must be met before a student is admitted to an upper division major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. Forty-four upper division units consisting of Management Information Systems 301, 306, 315, 380, 383, 481; Business Administration 300, 310, 323, 350, 360, 370; and 12 units selected from Management Information Systems 305, 396W, 406, 460, $482,492,515,585$. A " $C$ " (2.0) average or better is required in the courses stipulated here for the major.

Students must complete all upper division courses in the major within seven years prior to graduation. Students who will have completed any of those courses more than seven years before the projected date of graduation must contact the department chair for information about ways to certify knowledge of current course content.

## Information Systems Minor <br> (SIMS Code: 222337)

Admission to the minor in information systems requires completion of at least 60 units with a minimum grade point average of 2.9, and completion of Management Information Systems 180 with a grade of $C(2.0)$ or better.

The minor in information systems consists of a minimum of 18 units to include Management Information Systems 180 and 15 units selected from Management Information Systems 301, 305, $306,315,380,383,406,460,481,482,492,496,515,585$.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University. Students with a major in the Fowler College of Business, Hospitality and Tourism Management, or International Business should choose courses carefully with an adviser in their major department and the Fowler Center for Student Success (EBA-448).

Students must meet the prerequisites for the minor in effect at the time that they declare the minor. Contact the Fowler Center for Student Success (EBA-448) for admissions criteria and procedures.

## Courses (MIS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

MIS 180. Principles of Information Systems (3)
Fundamentals of information systems in business. Integration of information technology, e-commerce, systems analysis, database management systems, networking, security, and collaboration. Application of concepts through developing solutions to business problems using spreadsheets, database management systems, and web development tools/languages.
MIS 299. Special Study (3)
Prerequisites: Consent of department chair and instructor. Individual study.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
MIS 301. Statistical Analysis for Business (3)
Prerequisites: Management Information Systems 180; Mathematics 120; Statistics 119 or Economics 201. Approved upper division business major, business minor, or another major approved by the Fowler College of Business. Proof of completion of prerequisites required: Copy of transcript.

Statistical methods applied to business decision making.
MIS 305. Business Processes, ERP, and Analytics (3)
Prerequisites: Management Information Systems 180. Approved upper division business major, business minor, or another major approved by the Fowler College of Business. Proof of completion of prerequisites required: Copy of transcript.

Fundamental business processes and Enterprise Resource Planning (ERP) systems. Utilizing an ERP to run a business. How analytics are used by organizations to improve decision making.
MIS 306. Information Systems Analysis (3)
Prerequisites: Management Information Systems 180. Approved upper division business major, business minor, or another major approved by the Fowler College of Business. Proof of completion of prerequisites required: Copy of transcript.

Systems development life cycle concept, with emphasis on analysis of requirements using structured methodology. Acquisition strategies, application design alternatives, architecture design, feasibility study, implementation plans, needs assessment, and prototyping.

## MIS 315. Business Applications Programming (3)

Prerequisites: Management Information Systems 180. Approved upper division business major, business minor, or another major approved by the Fowler College of Business. Proof of completion of prerequisites required: Copy of transcript.

Computer programming for business applications. Appropriate data structures, control structures and program structures. Languages widely used in business applications.

## MIS 380. Data Management Systems (3)

Prerequisites: Management Information Systems 180. Approved upper division business major, business minor, or another major approved by the Fowler College of Business. Proof of completion of prerequisites required: Copy of transcript.

Methodology for applying data base management systems in design of information systems. Analysis of data base applications from perspectives of system users and systems analysts.

## MIS 383. Networks and Data Communications (3)

Prerequisites: Management Information Systems 180. Approved upper division business major, business minor, or another major approved by the Fowler College of Business. Proof of completion of prerequisites required: Copy of transcript.

Fundamental data communications concepts, including voice communications and carrier service offerings, communications hardware, and network design. Global, enterprise, workgroup, and local area networks. Protocols and network operating systems. Network security and control. (Formerly numbered Management Information Systems 483.)

MIS 396W. Reporting Techniques for Business Professionals (3) Prerequisites: Rhetoric and Writing Studies 290. Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a grade of $\mathrm{C}(2.0)$ or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Test score or verification of exemption; copy of transcript. Must be admitted to the upper division major in business.

Advanced preparation of oral and written reports used in business and other organizations. Individualized study of reports in student's career field.
MIS 401. Business Intelligence and Analytics (3)
Prerequisite: Management Information Systems 301.
Using diagnostic, predictive, prescriptive, and visual analytics to solve business problems and make data-informed decisions at operational, strategic, and tactical levels.
MIS 406. Information Systems Design (3)
Prerequisites: Management Information Systems 306, 315, 380.
Proof of completion of prerequisites required: Copy of transcript.
Business information systems design, installation, and implementation as part of the systems development life cycle, with emphasis on structured design methodology.
MIS 455. Digital Entrepreneurship and Innovation (3)
Prerequisite: Management Information Systems 306.
Innovative digital technologies. Communicate value creation, capture, and delivery. Monetization and commercialization, prototype new products and services, and strategize financing.
MIS 460. Project Management (3)
Prerequisite: Credit or concurrent registration in Business Administration 360. Proof of completion of prerequisite required: Copy of transcript.

Management of small and large projects. Work breakdown structure milestones, project cost estimating and reporting, and single and multiple resource allocation/leveling. Computerized project management software.

## MIS 481. E-Business/Web Development (3)

Prerequisites: Management Information Systems 306, 315, 380. Proof of completion of prerequisites required: Copy of transcript. Issues and tools related to developing Internet-based applications with database integration through hands-on projects. Developing complex sets of Web pages by linking front-end Web browser languages and databases via back-end server languages, database queries, and middleware.

## MIS 482. Information Technology Projects (3)

Prerequisites: Completion of at least 18 units of upper division management information systems courses. Proof of completion of prerequisites required: Copy of transcript.

Contemporary technologies in a business context to include artificial intelligence, cloud computing, data science tools, Internet of things, mobile programming, and robotics. Implementation with client organizations and/or in-depth research analysis resulting in proof of concept and applications.
MIS 492. Management of Information Systems (3)
Prerequisites: Management Information Systems 306 and 380. Proof of completion of prerequisites required: Copy of transcript.

Role of information systems in organizations from management perspective: strategic information system planning, systems administration, and management of end user computing. Management issues related to systems development and implementation. Management of computer operations and the computer center.

## MIS 495. Management Information Systems Internship (1-3)

Prerequisite: Upper division business major approved by the Fowler College of Business.

Internship with business firm, government agency, or nonprofit organization under joint supervision of internship organization and course instructor. Career readiness, fundamentals of management information systems, and professional development. Maximum credit six units.

MIS 496. Selected Topics in Information Systems (1-4)
Prerequisite: Consent of department chair.
Selected areas of concern in information systems. See Class Schedule for specific content. May be repeated with new content with consent of department chair. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.
MIS 498. Investigation and Report (1-3)
Prerequisites: Senior standing and consent of instructor.
A comprehensive and original study of a problem connected with information systems under the direction of one or more members of the information systems faculty. May be repeated with new content. Maximum credit six units.

## MIS 499. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

MIS 515. Object-Oriented Programming for Business Applications (3)
Prerequisite: Management Information Systems 315 or knowledge of one computer programming language. Proof of completion of prerequisite required: Copy of transcript.

Object-oriented programming as applied to business applications. Use of object-oriented classes, features, inheritance, and subclasses for modeling and processing of business information.
MIS 585. Fundamentals of Cybersecurity Management (3)
Prerequisite: Management Information Systems 383 or 687.
Cybersecurity risks, threats, and vulnerabilities. Technologies, procedures, and techniques to assess, control, detect, and remediate threats and vulnerabilities.
MIS 596. Contemporary Topics in Management Information Systems (1-3)
Prerequisites: Business major approved by the Fowler College of Business and consent of instructor.

Contemporary topics in management information systems. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

# Marketing 

In the Fowler College of Business

## OFFICE: Student Services East 3356

TELEPHONE: 619-594-5317 / FAX: 619-594-3272
WEBSITE: https://business.sdsu.edu/marketing
A Member of the AACSB International-The Association to Advance Collegiate Schools of Business.

## Faculty

Emeritus: Baker, W., Darley, Haas, Hale, Kartalija, Krentler, McFall, Sciglimpaglia, Tyagi, Vanier, Wotruba
Chair: Honea
Professors: Belch, Peter, Saghafi
Associate Professors: Baker, A., Castro, Dimofte, Honea, Poor
Assistant Professors: Cornelis, Gonzalez, Marquez, Umashankar, Yao
Lecturer: Olson

## Offered by the Department

Master of Science degree in business administration.
Master of Business Administration.
Major in marketing with the B.S. degree in business administration. Major in general business with the B.S. degree in
business administration. See Business Administration.
Minor in marketing.

## The Major

Marketing is "the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large." (American Marketing Association, 2013.) The marketing major focuses on how products/services and brands are developed, distributed, priced, promoted, and sold. This process requires an understanding of buyer and seller behavior within the context of the overall business environment. Attention is given to challenges and opportunities of global markets and the development of marketing programs for various regions and/or countries. Marketing is an interesting, complex, creative, fast-paced, and dynamic business activity. Marketers and sales professionals are involved in the development, launch, marketing, and sales process for products and services designed to satisfy consumer needs. They identify target markets for products and services as well as decide how to price them, where they will be distributed, and how to communicate and build relationships with customers. All of these decisions are made within a complex and dynamic cultural, economic, political, social, and technological environment.

Students majoring in marketing can choose the general marketing major or they can select a specialization in Integrated Marketing Communications or Professional Selling and Sales Management. Marketing is an essential part of every business as well as not-for-profit organization which means there are many employment opportunities for marketing graduates. Some of the more common career opportunities include sales and sales management, brand management, marketing research, market analyst, retailing, advertising, digital and social media, media planning and buying, and positions in advertising and marketing communications agencies as account planners or account executives.

## Business Honors Program

The Business Honors Program offers excellent upper division business students the opportunity to explore issues in our local, regional, and global business environments focusing on the social and ethical responsibility that business has to the community and society. Honors students will enroll in a one unit business honors seminar each semester. During their enrollment they will participate in activities to promote their academic and personal growth, documenting their work in a written portfolio.

Generally, students should apply to this program at the time of application to upper division business. Applicants must submit an essay with their application. Applicants must have a 3.6 cumulative GPA or good standing in the Weber Honors College. Students not meeting these requirements may petition for admission to the program. Successful completion of the Business Honors Program
will be recognized at graduation. Contact Dr. Robert A. Judge, Department of Management Information Systems, for more information about this program.

## Statement on Computers

Before enrolling in upper division courses in the Fowler College of Business, students must be competent in the operation of personal computers, including word processing and spreadsheets. Business students are strongly encouraged to have their own computers capable of running word processing, spreadsheet, presentation, e-mail, and Internet applications such as those found in packages sold by major software publishers. Availability of on-campus computing resources can be limited due to increasing demand across the university.

## Retention Policy

The Fowler College of Business expects that all business students will make reasonable academic progress towards the degree. Business premajors who have earned 60 units but have less than a 2.9 may be removed from the premajors and placed in undeclared. Upper division business majors earning less than a 2.0 average in their major GPA for two consecutive semesters may be removed from business and placed in undeclared.

## Transfer Credit

Lower Division: Courses clearly equivalent in scope and content to San Diego State University courses required for minors or as preparation for all business majors will be accepted from regionally accredited United States institutions and from foreign institutions recognized by San Diego State University and the Fowler College of Business.

Upper Division: It is the policy of the San Diego State University Fowler College of Business to accept upper division transfer credits where (a) the course content, requirements, and level are equivalent to San Diego State University courses and (b) where the course was taught in an AACSB International-The Association to Advance Collegiate Schools of Business accredited program. Exceptions require thorough documentation evidencing the above standards.

## Impacted Programs

The majors in the Department of Marketing are impacted. Before enrolling in any upper division courses in business administration, students must advance to an upper division business major and obtain a business major code. To be admitted to an upper division business major (accounting, finance, financial services, real estate, information systems, management, or marketing), students must meet the following criteria:
a. Complete with a grade of C (2.0) or better: Accountancy 201, 202; Economics 101, 102; Finance 240 (or an approved business law course); Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290 (RWS 290 is not required for the accounting major); and either Statistics 119 or Economics 201. These courses cannot be taken for credit/no credit (Cr/ NC);
b. Complete a minimum of 60 transferable semester units;
c. Have a cumulative GPA of 2.9.

Students who meet all requirements except the GPA may request to be placed on the waiting list. While all spaces are usually filled by eligible students, if there is room in the program after all the fully-qualified students have been accommodated, students will be admitted from the waiting list in GPA order. Contact the Fowler Center for Student Success (EBA-448), 619-594-5828, for more information.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Marketing Major

With the B.S. Degree in Business Administration
(Major Code: 05091)
A minor is not required with this major.
Preparation for the Major. Complete with a grade of C (2.0) or better: Accountancy 201, 202; Economics 101, 102; Finance 240 (or an approved business law course); Management Information Systems 180; Mathematics 120 (or an approved calculus course or an approved three-unit finite mathematics course); Rhetoric and Writing Studies 290; and either Statistics 119 or Economics 201. (27 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$; the minimum grade in each class is $C$. Additional progress requirements must be met before a student is admitted to an upper division major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. Students may elect to major in general marketing or to complete the marketing major with a specialization in integrated marketing communications or a specialization in professional selling and sales management.

## General Marketing

(SIMS Code: 222771)
Forty-seven upper division units consisting of Marketing 371, either 470 or 480, 479; Business Administration 300, 310, 323, 350, 360, 370. Management Information Systems 301; 18 units selected from Marketing 372, 373, 376, 377, 380, 470, 472, 473, 474, 476, 478, 480, 498, 499; Business Administration 404 or 405; Management Information Systems 305, 380. A grade of C (2.0) or better is required in the courses stipulated here for the major.

## Specialization in Integrated Marketing Communications

 (SIMS Code: 222775)Forty-seven upper division units consisting of Marketing 371, 373, either 470 or 480, 472; Business Administration 300, 310, 323, 350, 360, 370; Management Information Systems 301; 14 units selected from Marketing 380, 470, 476, 478, 480, 498, 499; Business Administration 404 or 405; Journalism and Media Studies* 408, 440, 460, 480, 560 ${ }^{\# \Phi}$, 562 ${ }^{\# \Phi}$, 565 ${ }^{\wedge \# \%}$, 566^*, 574^; Management Information Systems 305, 380; Psychology 340, 380. A grade of $C(2.0)$ or better is required in the courses stipulated here for the major.

[^17]
## Specialization in Professional Selling and Sales Management <br> (SIMS Code: 222776)

Forty-seven upper division units consisting of Marketing 371, 377, either 470 or 480, 473, 479; Business Administration 300, 310, 323, 350, 360, 370; Management Information Systems 301; 10 units selected from Marketing 372, 376, 470, 474, 478, 480, 498, 499; Business Administration 404 or 405; Management Information Systems 305, 380. A grade of C (2.0) or better is required in the courses stipulated here for the major.

## Marketing Minor

(SIMS Code: 222772)
Admission to the minor in marketing requires completion of at least 60 units with a minimum overall GPA of 2.9 and completion of Accountancy 201 and Economics 102 with a grade of $C$ (2.0) or better in each course.

The minor in marketing consists of a minimum of 17-21 units, of which 11 units must be in upper division courses, to include Accountancy 201; Business Administration 370*; Economics 102; and 11 to 12 units selected from Marketing 371, 372, 373, 376, 377, 380, 470, 472, 473, 474, 476, 480, 496, Management Information Systems 301^.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University. Students with a major in the Fowler College of Business, Hospitality and Tourism Management, or International Business should choose courses carefully with an adviser in their major department and the Fowler Center for Student Success (EBA-448).

Students must meet the prerequisites for the minor in effect at the time that they declare the minor. Contact the Fowler Center for Student Success (EBA-448) for admissions criteria and procedures.
*Business Administration 370 waived for Fowler College of Business,
Hospitality and Tourism Management, and International Business majors.
${ }^{\wedge}$ Students who are required to take Management Information Systems 301 for the major may not take the course for the minor.

## Courses (MKTG)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

## MKTG 371. Consumer Behavior (4)

Prerequisite: Business Administration 370 with a minimum grade of $C$ (2.0). Proof of completion of prerequisite required: Copy of transcript.

Consumer behavior concepts and theories for developing, implementing, and assessing marketing strategy. Psychological, social, and environmental factors in understanding of needs, wants, preferences, and decision making related to consumption behaviors.

## MKTG 372. Retail Marketing Methods (4)

Prerequisite: Business Administration 370 with a minimum grade of $C$ (2.0). Proof of completion of prerequisite required: Copy of transcript.

Retailing industry and retailer strategy to include online retailers, multi-channel retailing, consumer behavior, retail market strategy, site selection, locations, human resource management, merchandise management, pricing, marketing communications strategy, store layout, design, and management.

MKTG 373. Integrated Marketing Communications (4)
Prerequisite: Business Administration 370 with a minimum grade of $C$ (2.0). Proof of completion of prerequisite required: Copy of transcript.

Communication theory in context of integrating marketing communication tools to include advertising; digital, social, nontraditional media; sales promotion; public relations. Media planning and strategy, budgeting, effectiveness measurement, social/ethical issues, regulation of advertising and promotion.

## MKTG 376. Global Marketing Strategy (4)

Prerequisite: Business Administration 370 with a minimum grade of $C$ (2.0). Proof of completion of prerequisite required: Copy of transcript.

International marketing concepts. Assessing organization internationalization potential, external environmental analysis for global market segmentation, target country market selection, entry strategies, international product, pricing decisions, analysis of international distribution systems, developing international advertising and promotion programs.

## MKTG 377. Selling Strategy and Practices (4)

Prerequisite: Business Administration 370 with a minimum grade of $C$ (2.0). Proof of completion of prerequisite required: Copy of transcript.

Marketing and sales process. Theories, approaches, techniques used in selling process, development of sales presentations, and use of partnering/relationship selling and technology in professional selling.

## MKTG 380. Direct Marketing Methods (4)

Prerequisite: Business Administration 370 with a minimum grade of $C$ (2.0). Proof of completion of prerequisite required: Copy of transcript.

Direct marketing as part of a company or organization's marketing program. Major direct marketing media and methods to include direct mail, broadcast and print advertising, Internet and interactive media, catalogs, and telemarketing. Data base creation and management and effectiveness measurement for direct marketing programs.

## MKTG 470. Marketing Research (4)

Prerequisites: Completion of lower division courses in the major or minor. Business Administration 370 with a grade of $C$ (2.0) or better and Management Information Systems 301 with a grade of C(1.7) or better. Proof of completion of prerequisites required: Copy of transcript.

Marketing research process. Research design and data collection principles for qualitative and quantitative research techniques in marketing practice. Analysis, data visualization, and reporting of primary and secondary marketing research.

## MKTG 472. Advanced Integrated Marketing

Communications (4)
Prerequisites: Marketing 373 with minimum grade of C; Marketing 371 and 470 with minimum grade of $C$ or an average of 2.0 in both courses. Proof of completion of prerequisites required: Copy of transcript.

Management of marketing communications function with emphasis on integration and coordination of all activities. Planning, implementation, and coordination of marketing communications activities. Development, implementation, and program evaluation of an integrated marketing communications project.

## MKTG 473. Sales Management (4)

Prerequisite: Business Administration 370 with a minimum grade of $C$ (2.0). Proof of completion of prerequisite required: Copy of transcript.

Management of recruitment, training, motivation, and compensation of the sales personnel of a company. Policies and procedures used for organization, evaluation, and control of the sales force.

## MKTG 474. Business Marketing (4)

Prerequisite: Business Administration 370 with a minimum grade of $C$ (2.0). Proof of completion of prerequisite required: Copy of transcript.

Marketing strategy and practices designed for organizational customers. Purchasing practices of organizational buyers and development of marketing programs for enterprise customers and markets, both domestic and global.

## MKTG 476. Internet/Interactive Marketing (4)

Prerequisite: Business Administration 370 with a minimum grade of $C$ (2.0). Proof of completion of prerequisite required: Copy of transcript.

Impact of networked, cloud, mobile and contextual technologies on consumer behavior, business and marketing practice. Marketing communication and strategy leveraging the Internet to include search optimization, user experience design, social media, contextual advertising, pricing, distribution, commerce, and analytics.

## MKTG 478. Marketing and Sales for Social Impact (4)

Prerequisite: Marketing 371 with a grade of $C(2.0)$ or better.
Marketing and sales planning to solve social or environmental issues. Management of marketing and sales functions to address pressing needs at the base of the economic pyramid, underserved communities, or markets affected by environmental problems.

## MKTG 479. Strategic Marketing Management (4)

Prerequisites: Marketing 371 and 470 with a minimum grade of $C$ (2.0) or an average of 2.0 in both courses. Completion of lower division courses required in the major or minor. Proof of completion of prerequisites required: Copy of transcript.

Marketing concepts and decision tools for analyzing and solving marketing problems; marketing strategy and plans; problem identification, evaluation of alternatives, strategic and tactical recommendations.

## MKTG 480. Marketing Analytics (4)

Prerequisites: Business Administration 370 with a grade of $C$ (2.0) or better and Management Information Systems 301 with a grade of C- (1.7) or better.

Analysis and interpretation of large, complex data sets (Big Data). Theory, analytical approaches to solve marketing problems, utilizing software tools for marketing and sales decision making.

## MKTG 496. Selected Topics in Marketing (1-4)

Prerequisite: Consent of department chair.
Selected areas of concern in marketing. See Class Schedule for specific content. May be repeated with new content with consent of department chair. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

## MKTG 498. Investigation and Report (1-3)

Prerequisites: Senior standing and consent of instructor.
A comprehensive and original study of a problem connected with marketing under the direction of one or more members of the marketing staff. May be repeated with new content. Maximum credit six units.

## MKTG 499. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

GRADUATE COURSES
Refer to the Graduate Bulletin.

## Mathematics

In the College of Sciences

OFFICE: Geology/Mathematics/Computer Science 413
TELEPHONE: 619-594-6191
Faculty
Emeritus: Carlson, Deaton, Elwin, Garrison, Geveci, Grone, Hager, Hintzman, Hui, Lesley, Lutz, Marcus, McLeod, Nemirovsky, Noble, Nower, Pierce, Salamon, Saltz, Short, Smith, Sowder, J., Sowder, L., Thompson, Van de Wetering, Verzi (SDSU-IV), Whitman

Chair: O'Sullivan
Professors: Blomgren, Carretero, Castillo, Dunster, Interlando, Lobato, Mahaffy, O’Sullivan, Palacios, Ponomarenko, Rasmussen, Shen, S.
Associate Professors: Bowers, Curtis, Gilles, Kirschvink, Nickerson, Shen, B., Vaidya, Zahner
Assistant Professors: George, Hong, Luque, O’Neill, Pilgrim, Qin (SDSU-IV), Reinholz, Tang (SDSU-IV)
Offered by the Department of Mathematics and Statistics
Master of Arts degree in mathematics.
Master of Science degree in applied mathematics.
Concentration in dynamical systems.
Concentration in mathematical theory of communication systems.
Master of Arts for teaching service with a concentration in mathematics.
Major in mathematics with the B.A. degree in liberal arts and sciences.
Major in mathematics with the B.S. degree
in applied arts and sciences.
Emphasis in applied mathematics.
Emphasis in computational science. Emphasis in mathematics education. Emphasis in science.
Teaching major in mathematics in preparation for the single subject teaching credential.
Emphasis in integrated teacher education program (ITEP-SS).
Minor in mathematics.
Certificate in communication systems
(refer to the Graduate Bulletin).
Certificate in single subject mathematics.

## The Majors

Mathematics is the language and instrument for the sciences and technology. It is concerned with a wide range of diverse problems from developing techniques to model real world applications and designing efficient methods for calculating their solutions, to creating new branches of mathematics and theories for as yet unsolved problems. Some students find mathematics stimulating because of its many and varied applications, while others are fascinated and attracted to it for the beauty of its intrinsic order, structure, and form.

Because of its broad scope, degrees in mathematics can prepare students for many different careers and the Department of Mathematics and Statistics offers a variety of such degrees and emphases to provide students with several blends and specialties according to their interests and goals.

Graduates with a mathematics major have many options for either careers in applications, for further study in graduate school, or for teaching. Mathematics majors are important because their training involves quantitative abilities and critical reasoning that many potential employers can utilize. With a minor in an area of applications, graduates are suited for further graduate study in many areas that heavily depend upon mathematical methods and techniques. Graduates with an interest in the more theoretical aspects of mathematics are sought after in many diverse graduate programs from applied and pure mathematics to computer and computational sciences and statistics. Careers in teaching include positions in secondary schools, for which a teaching credential is additionally required, teaching in two year colleges, for which a
master's degree is required, and teaching at the university level, which requires a doctorate degree and involves research and creation of new mathematics.

## Impacted Program

The mathematics major and emphases are impacted programs. To be admitted to the mathematics major or an emphasis, students must meet the following criteria:
a. Complete preparation for the major. Refer to the individual program for specific impaction criteria;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.
d. For the mathematics major with an emphasis in integrated teacher education program (ITEP-SS) students must have a minimum cumulative GPA of 2.67.
To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Mathematics Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 17011) (SIMS Code: 776301)
All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 60 units in mathematics and statistics courses can apply to the degree.

A minor is not required with this major.
Impacted Program. Complete with a grade of C (2.0) or better: Mathematics 150, 151, 245, 252, 254, Statistics 250, and one course selected from Computer Science 107, 200, Statistics 200. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). The cumulative GPA in Mathematics 245, 252, and 254 must be a C+ (2.3) or better.

Preparation for the Major. Mathematics 150, 151, 245, 252, 254, Statistics 250, and one course selected from Computer Science 107, 200, Statistics 200. These courses must be completed with a grade of C (2.0) or better, and cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). The cumulative GPA in Mathematics 245, 252, and 254 must be a C+ (2.3) or better. (24-25 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to the section of this catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 30 upper division units selected with approval of the departmental adviser before starting upper division work to include Mathematics 320, 330, 337, 340, 524; one course selected from Mathematics 520, 530, 531, 537, 538, 542, 543 , Statistics 551B; and 12 units of electives. Students planning to take Mathematics 499 as an elective course must obtain approval from the program adviser.

Master Plan. A master plan of the courses taken to fulfill the major must be approved by the adviser and filed with the major department.

## Mathematics Major

With the B.S. Degree in Applied Arts and Sciences

## (Major Code: 17031)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

There are four emphases offered in this major: Applied Mathematics, Computational Science, Mathematics Education, and Science.

## Emphasis in Applied Mathematics

## (SIMS Code: 776313)

This emphasis is designed to train the student in those areas of mathematics which may be applied to formulate and solve problems in other disciplines. The program is designed to qualify the student for employment as an applied mathematician, but the graduate would also be well prepared for graduate study in pure or applied mathematics.

A minor is not required with this major.
Impacted Program. Complete with a grade of $C(2.0)$ or better: Mathematics 150, 151, 245, 252, 254, Statistics 250, and one course selected from Computer Science 107, 200, Statistics 200. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). The cumulative GPA in Mathematics 245, 252, and 254 must be a C+ (2.3) or better.

Preparation for the Major. Mathematics 150, 151, 245, 252, 254, Statistics 250, and one course selected from Computer Science 107, 200, Statistics 200. These courses must be completed with a grade of C (2.0) or better, and cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). The cumulative GPA in Mathematics 245, 252, and 254 must be a $\mathrm{C}+$ (2.3) or better. (24-25 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Mathematics $320,330,337,340 ; 524$ or $543 ; 530$ or 531 or 532 ; Statistics 350 A or 550 or 551A; and 15 units of electives in mathematics or an area to which mathematics may be applied (approved by the applied mathematics adviser) excluding Mathematics 302, 303, 312, 313, 342A, 342B, 413, 414, 509. Students planning to take Mathematics 499 as an elective course must obtain approval from the program adviser.

Master Plan. A master plan of the courses taken to fulfill the major must be approved by the adviser and filed with the major department.

Auxiliary Area. A minimum of 10 units (lower or upper division) from an area to which mathematics may be applied. A typical program might be Physics 195, 195L, 196, 196L, 197, 197L; or Chemistry 200, 201, and a course for which these are prerequisite; or Economics 101, 102, 320, 321. The intent is to train the student in an area in some depth. Some latitude may be allowed in the choice of department and mix of courses, but all programs must be approved by the applied mathematics adviser. The 10 unit requirement is minimal, and a minor in an approved field is highly recommended.

## Emphasis in Computational Science

## (SIMS Code: 776322)

A minor is not required with this major.
Impacted Program. Complete with a grade of $C(2.0)$ or better: Mathematics 150, 151, 245, 252, 254, Computer Science 107, 108, and Statistics 250. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). The cumulative GPA in Mathematics 245, 252, and 254 must be a C+ (2.3) or better.

Preparation for the Major. Mathematics 150, 151, 245, 252, 254, Computer Science 107, 108, and Statistics 250. These courses must be completed with a grade of $C(2.0)$ or better, and cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). The cumulative GPA in Mathematics 245,252 , and 254 must be a C+ (2.3) or better. ( 27 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing
one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 39 upper division units to include Mathematics 320, 330, 337, 340; 524 or 543; Computer Science 310; at least nine units selected from Computational Science 526, 536, Computer Science 503, 558, Mathematics 336, 525, 532, 537, 542, 543; three units of Mathematics 499 (Senior Project - approved by the adviser); and nine units of electives in computer science, mathematics, or statistics (approved by the adviser) excluding Mathematics 302, 303, 312, 313, 342A, 342B, 413, 414, 509.

Master Plan. A master plan of the courses taken to fulfill the major must be approved by the adviser and filed with the major department.

## Emphasis in Mathematics Education <br> (SIMS Code: 776335)

This emphasis allows students with a strong interest in mathematics and an interest in teaching in the secondary schools to be prepared for both graduate school in mathematics and admission into the Single Subject Teaching Credential program. This degree also prepares with options to teach at the community college level. A minor is not required with this major.
Impacted Program. Complete with a grade of $C$ (2.0) or better: Mathematics 150, 151, 245, 252, 254, Statistics 250, Teacher Education 211A, and one course selected from Computer Science 107, 200, Statistics 200. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). The cumulative GPA in Mathematics 245, 252, and 254 must be a $\mathrm{C}+(2.3)$ or better.

Preparation for the Major. Mathematics 150, 151, 245, 252, 254, Statistics 250, Teacher Education 211A, and one course selected from Computer Science 107, 200, Statistics 200. These courses must be completed with a grade of $C$ (2.0) or better, and cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). The cumulative GPA in Mathematics 245, 252, and 254 must be a C+ (2.3) or better. (25-26 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 37 upper division units in mathematics to include Mathematics 302, 303, 320, 330, 337, 340, 341, 414, 508 or 510,524 or 543,530 or 531 or 532 , Statistics 350 A or 550 or 551A; and three units of electives in mathematics approved by the adviser for the major.

Master Plan. A master plan of the courses taken to fulfill the major must be approved by the adviser and filed with the major department.

Auxiliary Area. A minimum of nine lower or upper division units of teaching-related electives are required from an area that will enhance understanding of teaching or applications of teaching mathematics. Elective courses include Physics 195, 195L, or Chemistry 200, 201. All programs must be approved by the adviser.

## Emphasis in Science

## (SIMS Code: 776348)

This purpose of this emphasis is to allow students with a strong interest in the mathematical aspects of a particular science to apply courses in that science to their major. This will provide a good background for employment or graduate work in applied mathematics or in that science.

A minor is not required with this major.
Impacted Program. Complete with a grade of C (2.0) or better: Mathematics 150,151, 245, 252, 254, Statistics 250, and one course selected from Computer Science 107, 200, Statistics 200. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). The cumulative GPA in Mathematics 245, 252, and 254 must be a $\mathrm{C}+(2.3)$ or better.

Preparation for the Major. Mathematics 150, 151, 245, 252, 254, Statistics 250, and one course selected from Computer Science 107, 200, Statistics 200. These courses must be completed with a grade of C (2.0) or better, and cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). The cumulative GPA in Mathematics 245, 252, and 254 must be a $\mathrm{C}+$ (2.3) or better. (24-25 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing
one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Mathematics 330, 337, 340; 524 or 543; at least six units selected from Mathematics 320,$525 ; 530$ or 532 ; 531, 537; 12 units from a science to which mathematics may be applied (these should be from a single science and must be approved by the B.S. adviser); and six units of electives in computer science, mathematics, or statistics excluding Mathematics 302, 303, 312, 313, 342A, 342B, 413, 414, 509. Students planning to take Mathematics 499 as an elective course must obtain approval from the program adviser.

Master Plan. A master plan of the courses taken to fulfill the major must be approved by the adviser and filed with the major department.

## Mathematics Major

In preparation for the Single Subject Teaching Credential With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 17011) (SIMS Code: 776303)

All candidates for a teaching credential must complete all requirements as outlined in this section of the catalog under Dual Language and English Learner Education or Teacher Education. For students completing the single subject teaching credential program, no more than 48 units in mathematics and statistics courses can apply to the degree.

This major may be used by students preparing to be high school teachers as an undergraduate major for the B.A. degree in liberal arts and sciences.

A minor is not required with this major.
Impacted Program. Complete with a grade of $C$ (2.0) or better: Mathematics 150, 151, 245, 252, 254, Statistics 250, and Teacher Education 211A. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ).

Preparation for the Major. Mathematics 150, 151, 245, 252, 254, Statistics 250, and Teacher Education 211A. These courses must be completed with a grade of $C$ (2.0) or better, and cannot be taken for credit/no credit (Cr/NC). (22 units) Recommended: Computer Science 107, Physics 195, 195L, 196, 196L, 197, 197L.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language as part of the preparation for the major. Refer to the section of this catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 25 upper division units in mathematics to include Mathematics 302, 303, 320, 330, 341, 414, Statistics 550; an upper division course in geometry; and three units of electives in mathematics approved by the adviser for the major.

Master Plan. A master plan of the courses taken to fulfill the major must be approved by the adviser and filed with the major department.

## Emphasis in Integrated Teacher Education Program (ITEP-SS)

## (SIMS Code: 776306)

This emphasis combines the degree and credential into a 129 unit, four year integrated teacher education program. The program is designed to qualify the student for a mathematics degree and a preliminary single subject teaching credential in mathematics.

A minor is not required with this major.
Impacted Program. Complete with a grade of $C(2.0)$ or better: Mathematics 150, 151, 245, 252, 254; Statistics 250; Teacher Education 170 [or Child and Family Development 170], 211A, 280. These courses must be completed with a grade of $C(2.0)$ or better and cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ).

Preparation for the Major. Mathematics 150, 151, 245, 252, 254, Statistics 250, Teacher Education 170 [or Child and Family Development 170], 211A, 280. (26 units) These courses must be completed with a grade of $C(2.0)$ or better and cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ).

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to the section of this catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 8 or above before taking Teacher Education 405W* and earn a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 28 upper division units in mathematics to include Mathematics 302, 303, 320, 330, 341, 414, 510; Statistics 550; Teacher Education 405W*; and three units of electives in mathematics approved by the adviser for the major.

Additional Requirements for Subject Matter Preparation Certification. Certification of subject matter competency by the Department of Mathematics and Statistics requires completion of all preparation for the major and major courses with the required grades. (At most one grade of C- or lower among the courses listed under the major is permitted. If a course is repeated, the highest grade will count.) Certification must be achieved before student teaching.

ITEP Admission Requirements. Students apply for admission to the mathematics major with an emphasis in integrated teacher education program (ITEP-SS) during the spring semester of their sophomore year. Students who qualify for admission the summer prior to their junior year must have a GPA of 2.67 or better, passing scores on the CBEST, a documented field experience, and complete program application.

Credential Requirements (32 units). Education 484, 970 (1 unit); Special Education 450; Teacher Education 303 (3 units), 903 (1 unit), 914A (3 units), 924A (3 units), 933, 954 (3 units), 963 ( 9 units).

## *Required of all single subject ITEP majors regardless of Writing Proficiency

 Assessment score.
## Mathematics Minor

(Minor Code: 17011) (SIMS Code: 776301)
The minor in mathematics consists of a minimum of 20-21 units in mathematics to include 12 upper division units, at least six of which have as prerequisite Mathematics 151; or Mathematics 252 and nine upper division units in mathematics, at least six of which have as prerequisite Mathematics 151. The courses selected will be subject to the approval of the minor adviser.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Single Subject Mathematics Certificate (SIMS Code: 776357)

The purpose of the Single Subject Mathematics Certificate program is to provide individuals appropriate mathematics coursework to establish their subject matter competency in accordance with California State requirements for high school mathematics teachers. Admission is open to individuals who are majoring or have majored in an area other than mathematics and who have the equivalent of two years of high school mathematics and satisfy the SDSU Mathematics/Quantitative Reasoning Assessment requirement. In order to enroll in the program, individuals should contact the single subject mathematics credential adviser in the Department of Mathematics and Statistics.

The program consists of 46 units to include Mathematics 150, 151; and $245,252,254,302,303,320,330,341,414,510$, Statistics 250,550 , and three units of upper division electives selected from mathematical or physical sciences.

Individuals must complete at least nine upper division units at San Diego State University and have a cumulative grade point average of 2.5 in the required courses to qualify for the certificate.

## Mathematics Placement Assessment

All students who expect to enroll in Computer Science 100, 107, Mathematics 118, 120, 124, 140, 141, 150, 210, 211, Statistics 119, 250 must satisfy the SDSU Mathematics/Quantitative Reasoning Assessment requirement. For Mathematics 124, 141, and 150, students must also pass the Mathematics Placement Assessment. For Mathematics 150, certain prerequisite courses taken at San

Diego State University may be used to satisfy the Mathematics Placement Assessment requirement. For Mathematics 312 and 313, students must pass the Liberal Studies Mathematics Proficiency Assessment.

## Computer Science

(See this section of catalog under Computer Science)

## Statistics

(See this section of catalog under Statistics)

## Courses (MATH)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

MATH 110. Mathematics for Life (3) [GE]
Mathematical problem solving pertinent to daily life. Exponential and logarithmic functions; conversion, estimation, and measurements; personal finance; probability and statistics.
MATH 110X. Mathematics for Life Support (1) $\mathrm{Cr} / \mathrm{NC}$
Three hours of activity.
Prerequisite: Concurrent registration in Mathematics 110. Required for students who have not satisfied the SDSU Mathematics/Quantitative Reasoning Assessment requirement.

Required support course for Mathematics 110. Credit in this course satisfies the SDSU Mathematics/Quantitative Reasoning Assessment requirement.
MATH 118. Topics in Mathematics (3) [GE]
Topics selected from algebra, analysis, geometry, logic, probability, or statistics, designed to give student insight into structure of mathematical theories and their applications.
MATH 120. Calculus for Business Analysis (3) [GE]
Matrix algebra. Calculus including differentiation and integration. Graphing and optimization. Exponential and logarithmic functions. Multivariable calculus. Not open to students with credit in Mathematics 150.
MATH 124. Calculus for the Life Sciences (4) [GE]
Three lectures and three hours of laboratory.
Prerequisite: Knowledge of algebra, geometry, and trigonometry as demonstrated by either (1) satisfactory completion of Mathematics 141 with a grade of $C$ (2.0) or above; or (2) qualification on the Mathematics Placement Assessment. Proof of completion of prerequisite required.

Basic concepts of calculus with life science applications. Topics from differential and integral calculus and an introduction to elementary differential equations. Computer applications to biological problems. Not open to students with credit in Mathematics 150.

## MATH 140. College Algebra (3) [GE]

Solution of equations and inequalities, systems of equations, graphs and attributes of functions (transformations, end behavior, domain, range), polynomial and exponential functions. Not open to students with credit in Mathematics 120, 124, 141, or 150. (Formerly numbered Mathematics 105.)

## MATH 140X. College Algebra Support (1) $\mathrm{Cr} / \mathrm{NC}$

Three hours of activity.
Prerequisite: Concurrent registration in Mathematics 140. Required for students who have not satisfied the SDSU Mathematics/Quantitative Reasoning Assessment requirement.

Required support course for Mathematics 140. Credit in this course satisfies the SDSU Mathematics/Quantitative Reasoning Assessment requirement. (Formerly numbered Mathematics 105X.)

## MATH 141. Precalculus (3) [GE]

Two lectures and two hours of activity.
Prerequisite: Knowledge of algebra as demonstrated by (1) satisfactory completion of Mathematics 140 with a grade of $C$ (2.0) or better; or (2) qualification on the Mathematics Placement Assessment. Proof of completion of prerequisite required.

Rational, trigonometric, exponential and logarithmic functions; conic sections; parametric equations. Not open to students with credit in Mathematics 120, 124, or 150.

## MATH 141A. Precalculus ALEKS Laboratory (1)

Three hours of laboratory.
Prerequisite: Concurrent registration in Mathematics 141.
ALEKS-based laboratory to assist students in achieving success in precalculus.

## MATH 150. Calculus I (4) [GE]

Three lectures and two hours of activity.
Prerequisite: Knowledge of algebra, geometry, and trigonometry as demonstrated by either (1) satisfactory completion of Mathematics 141 with a grade of $C$ (2.0) or better; or (2) qualification on the Mathematics Placement Assessment. Proof of completion of prerequisite required.

Algebraic and transcendental functions. Continuity and limits. The derivative and its applications. The integral and the fundamental theorem of calculus.

## MATH 150A. Calculus I ALEKS Laboratory (1)

Three hours of laboratory.
Prerequisite: Concurrent registration in Mathematics 150.
ALEKS-based laboratory to assist students in achieving success in Calculus I .

## MATH 151. Calculus II (4) [GE]

Three lectures and two hours of activity.
Prerequisite: Mathematics 150 with a grade of $C(2.0)$ or better. Proof of completion of prerequisite required.

Techniques and applications of integration. Improper integrals. Differential equations. Infinite series. Conic sections. Curves in parametric form, polar coordinates.

## MATH 210. Number Systems in Elementary

Mathematics (3) [GE]
Number sense, operation concepts, estimation, mental arithmetic, algorithms, problem solving, whole, rational, real numbers, ratio, and number theory. This course or its equivalent is required for students working toward a multiple subject credential in elementary education.

## MATH 210X. Number Systems in Elementary Mathematics

Support (1) Cr/NC
Three hours of activity.
Prerequisite: Concurrent registration in Mathematics 210. Required for students who have not satisfied the SDSU Mathematics/Quantitative Reasoning Assessment requirement.

Required support course for Mathematics 210. Credit in this course satisfies the SDSU Mathematics/Quantitative Reasoning Assessment requirement.
MATH 211. Geometry in Elementary Mathematics (3) [GE]
Prerequisite: Mathematics 210.
Two and three dimensional shapes and interrelationships, congruence, similarity and proportional reasoning, measurement of length, angle size, area, volume, metric system, and problem solving.
MATH 245. Discrete Mathematics (3) [GE]
Prerequisite: Mathematics 124 or 150 with a grade of $C(2.0)$ or better. Recommended: Mathematics 151.

Logic, methods of proof, set theory, number theory, equivalence and order relations, counting (combinations and permutations), solving recurrence relations.

## MATH 252. Calculus III (4) [GE]

Prerequisite: Mathematics 151 with a grade of $C$ (2.0) or better.
Functions of several variables. Vectors. Partial derivatives and multiple integrals. Line integrals and Green's Theorem.
MATH 254. Introduction to Linear Algebra (3) [GE]
Prerequisite: Mathematics 151 with a grade of $C$ (2.0) or better.
Matrix algebra, Gaussian elimination, determinants, vector spaces, linear transformations, orthogonality, eigenvalues, and

## eigenvectors.

MATH 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.
MATH 299. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## Mathematics

## UPPER DIVISION COURSES

(Intended for Undergraduates)
NOTE: Proof of completion of prerequisites required for all upper division courses: Copy of transcript.
MATH 302. Transition to Higher Mathematics (3)
Prerequisite: Mathematics 141 or 150.
Selected topics in mathematics to emphasize proof writing and problem solving. Intended for those planning to teach secondary school mathematics.

## MATH 303. History of Mathematics (3) [GE]

Prerequisite: Mathematics 141 or completion of the General Education requirement in Foundations of Learning IIA., Natural Sciences and Quantitative Reasoning for nonmajors.

Major currents in the development of mathematics from ancient Egypt and Babylon to late nineteenth century Europe.
MATH 312. Topics from Elementary Mathematics: Statistics and Probability (3)
Prerequisites: Mathematics 211 and satisfactory performance on Liberal Studies Mathematics Proficiency Assessment.

Topics from statistics and probability. Enrollment limited to future teachers in grades K-8.
MATH 313. Topics in Elementary Mathematics: Algebra of Change (3)
Prerequisites: Mathematics 211 and satisfactory performance on Liberal Studies Mathematics Proficiency Assessment.

Capstone course for prospective K-8 teachers. Advanced topics in mathematics selected from algebra, number systems, transformation geometry, and problem solving. Enrollment limited to future teachers in grades K-8.

## MATH 320. Abstract Algebra (3)

Prerequisites: Mathematics 245 and 254 with a grade of $C$ (2.0) or better in each course. Proof of completion of prerequisites required: Copy of transcript.

Elementary number theory and rings to include ideals, polynomial rings, quotient rings, ring homomorphisms and isomorphisms. Introduction to basic aspects of group theory. (Formerly numbered Mathematics 521A.)

## MATH 330. Advanced Calculus I (3)

Prerequisites: Mathematics 245 and either 254 or 342A with a grade of $C$ (2.0) or better in each course. Proof of completion of prerequisites required: Copy of transcript.

Completeness of the real numbers and its implications, sequences of real numbers, and continuity and differentiability of functions of one real variable. (Formerly numbered Mathematics 534A.)
MATH 336. Introduction to Mathematical Modeling (3)
Prerequisite: Mathematics 254 with a grade of $C$ (2.0) or better.
Models from the physical, natural, and social sciences including population models and arms race models. Emphasis on classes of models such as equilibrium models and compartment models.

## MATH 337. Elementary Differential Equations (3)

Prerequisite: Mathematics 254 or 342 A with a grade of $C$ (2.0) or better.
Integration of first-order differential equations, initial and boundary value problems for second-order equations, series solutions and transform methods, regular singularities.
MATH 340. Programming in Mathematics (3)
One lecture and two hours of activity.
Prerequisites: Mathematics 151 and 245 with a grade of $C$ (2.0) or better in each course. Proof of completion of prerequisites required: Copy of transcript.

Introduction to programming in mathematics. Modeling, problem solving, visualization. Not open to students with credit in Mathematics 242.
MATH 341. Mathematics Software Workshop (1)
Two hours of activity.
Prerequisite: Mathematics 150.
Lesson plan design using teacher-based technologies. (Formerly numbered Mathematics 241 .)

## MATH 342A. Methods of Applied Mathematics I (3)

Prerequisite: Mathematics 252.
Vector analysis, divergence and Stokes' theorem and related integral theorems. Matrix analysis, eigenvalues and eigenvectors, diagonalization. Introduction to ordinary differential equations. Computer software packages for matrix applications, solving, and graphing differential equations.
MATH 342B. Methods of Applied Mathematics II (3)
Prerequisite: Mathematics 342A with a grade of $C$ (2.0) or better.
Second order ordinary differential equations, power series methods, Bessel functions, Legendre polynomials. Linear partial differential equations, separation of variables, Fourier series, Sturm-Liouville theory, orthogonal expansions, Fourier Transforms. Use of computer software packages for symbolic algebra and solution of differential equations.
MATH 413. Mathematics for the Middle Grades (3)
Prerequisite: Mathematics 313.
Teacher-level look at mathematics taught in middle grades, to include proportional reasoning, rational and real numbers, probability, and algebra. Intended for those planning to teach mathematics in middle grades; cannot be used as part of major or minor in mathematical sciences with exception of major for single subject teaching credential. Students in the SSTC major must receive instructor permission.
MATH 414. Mathematics Curriculum and Instruction (3)
Prerequisites: Senior standing and 12 upper division units in mathematics.

Historical development of mathematics and mathematics curriculum. Principles and procedures of mathematics instruction in secondary schools. For secondary and postsecondary teachers and teacher candidates. Course cannot be used as part of the major or minor in mathematical sciences with exception of major for the single subject teaching credential.
MATH 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## MATH 499. Special Study (1-3)

Prerequisites: Consent of instructor and at least one 300 -level mathematics course with a grade of C (2.0) or better.

Individual study. Maximum credit six units. No more than three units may be applied to the major.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
MATH 508. Dynamical Systems and Modeling (3)
Prerequisite: Mathematics 254 or graduate standing.
Differential equations using analytical, graphical, and numerical representations.
MATH 509. Computers in Teaching Mathematics (3)
Two lectures and three hours of laboratory.
Prerequisite: Mathematics 252 with a grade of $C$ (2.0) or better. Proof of completion of prerequisite required: Copy of transcript.

Solving mathematical tasks using an appropriate computer interface, and problem-based curricula. Intended for those interested in mathematics teaching.
MATH 510. Introduction to the Foundations of Geometry (3)
Prerequisite: Mathematics 151 with a grade of $C$ (2.0) or better.
Proof of completion of prerequisite required: Copy of transcript.
The foundations of Euclidean and hyperbolic geometries. Highly recommended for all prospective teachers of high school geometry.
MATH 520. Algebraic Structures (3)
Prerequisite: Mathematics 320 with a grade of $C(2.0)$ or better or graduate standing. Proof of completion of prerequisite required: Copy of transcript.

Continuation of Mathematics 320. Group theory to include finite Abelian groups, group homomorphisms and isomorphisms, normal subgroups, quotient groups, and Sylow theorems. Selected advanced topics to include field extensions or integral domains. (Formerly numbered Mathematics 521B.)

## MATH 522. Number Theory (3)

Prerequisite: Mathematics 245 with a grade of C (2.0) or better. Proof of completion of prerequisite required: Copy of transcript.

Theory of numbers to include congruences, Diophantine equations, and a study of prime numbers; cryptography.
MATH 523. Mathematical Logic (3)
Prerequisite: Mathematics 245 with a grade of $C$ (2.0) or better. Proof of completion of prerequisite required: Copy of transcript.

Propositional logic and predicate calculus. Rules of proof and models. Completeness and the undecidability of arithmetic. Not open to students with credit in Philosophy 521.

## MATH 524. Linear Algebra (3)

Prerequisites: Mathematics 245 and either 254 or 342A with a grade of $C$ (2.0) or better in each course. Proof of completion of prerequisites required: Copy of transcript.

Vector spaces, linear transformations, orthogonality, eigenvalues and eigenvectors, normal forms for complex matrices, positive definite matrices and congruence.

## MATH 525. Algebraic Coding Theory (3)

Prerequisite: Mathematics 254 with a grade of C (2.0) or better. Proof of completion of prerequisite required: Copy of transcript.

Linear codes, perfect and related codes, cyclic linear codes, BCH codes, burst error-correcting codes.

## MATH 530. Advanced Calculus II (3)

Prerequisite: Mathematics 330 with a grade of $C$ (2.0) or better or graduate standing. Proof of completion of prerequisite required: Copy of transcript.

Formal definitions and analysis within the framework of single variable functions. Advanced concepts in analysis. (Formerly numbered Mathematics 534B.)
MATH 531. Partial Differential Equations (3)
Prerequisites: Mathematics 252 and 337 with a grade of C (2.0) or better in each course. Proof of completion of prerequisites required: Copy of transcript.

Boundary value problems for heat and wave equations: eigenfunction expansions, Sturm-Liouville theory and Fourier series. D'Alembert's solution to wave equation; characteristics. Laplace's equation, maximum principles, Bessel functions.
MATH 532. Functions of a Complex Variable (3)
Prerequisite: Mathematics 252 with a grade of $C$ (2.0) or better. Proof of completion of prerequisite required: Copy of transcript.

Analytic functions, Cauchy-Riemann equations, theorem of Cauchy, Laurent series, calculus of residues, and applications.
MATH 533. Vector Calculus (3)
Prerequisite: Mathematics 254 or 342A with a grade of C (2.0) or better. Proof of completion of prerequisite required: Copy of transcript.

Scalar and vector fields; gradient, divergence, curl, line and surface integrals: Green's, Stokes' and divergence theorems. Green's identities. Applications to potential theory or fluid mechanics or electromagnetism.
MATH 537. Ordinary Differential Equations (3)
Prerequisite: Graduate standing or Mathematics 330 or 337 with a grade of $C$ (2.0) or better. Proof of completion of prerequisite required: Copy of transcript.

Theory of ordinary differential equations: existence and uniqueness, dependence on initial conditions and parameters, linear systems, stability and asymptotic behavior, plane autonomous systems, series solutions at regular singular points.
MATH 538. Discrete Dynamical Systems and Chaos (3)
Prerequisite: Mathematics 330, 337, 340, or 342B with a grade of $C$ (2.0) or better. Proof of completion of prerequisite required: Copy of transcript.

One- and two-dimensional iterated maps, equilibria and their stability, sensitive dependence on initial conditions, Lyapunov exponents, horseshoe maps, period doubling, chaotic attractors, Poincare maps, stable/unstable manifolds, bifurcations. Applications in biology, chemistry, physics, engineering, and other sciences.

## MATH 542. Introduction to Computational Ordinary of

Differential Equations (3)
Prerequisites: Mathematics 340; and either Mathematics 337, 342 A , or Aerospace Engineering 280 with a grade of $\mathrm{C}(2.0)$ or better in each course. Proof of completion of prerequisites required: Copy of transcript.

Initial and boundary value problems for ordinary differential equations. Runge-Kutta, linear multi-step, predictor-corrector, adaptive, hybrid, shooting, and general linear methods. System, stiffness, and non-linear problems. Iterative methods.

## MATH 543. Numerical Matrix Analysis (3)

Prerequisites: Mathematics 340; and either Mathematics 254, 342 A , or Aerospace Engineering 280 with a grade of $C$ (2.0) or better. Proof of completion of prerequisites required: Copy of transcript.

Singular value decomposition. Projections, QR-factorization, orthogonalization, conditioning and stability, Gaussian Elimination, LU-Factorization, pivoting strategies, Cholesky Factorization. Iterative methods for diagonalization and eigensystem computation. Tridiagonal, Hessenberg, and Household matrices. The QR algorithm.

## MATH 562. Mathematical Methods of Operations Research (3)

Prerequisites: Mathematics 252 and 254 with a grade of C (2.0) or better in each course. Proof of completion of prerequisites required: Copy of transcript.

Theory and applications concerned with optimization of linear and non-linear functions of several variables subject to constraints, including simplex algorithms, duality, applications to game theory, and descent algorithms.

## MATH 579. Combinatorics (3)

Prerequisite: Mathematics 245 with a grade of $C(2.0)$ or better. Proof of completion of prerequisite required: Copy of transcript.

Permutations, combinations, generating functions, recurrence relations, inclusion-exclusion counting. Polya's theory of counting, other topics and applications.

## MATH 595. Mathematical Biology and Biomedicine (3)

Prerequisites: Mathematics 254 and 337, or 342A, or Aerospace Engineering 280.

Mathematical and computational modeling techniques to include difference and differential equations; probabilistic and statistical models.

## MATH 596. Advanced Topics in Mathematics (1-4)

Prerequisite: Consent of instructor.
Selected topics in classical and modern mathematical sciences. May be repeated with the approval of the instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## Mathematics Education

## Course (MTHED)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSE IN MATHEMATICS EDUCATION (MTHED)

(Intended for Undergraduates)
MTHED 212. Children's Mathematical Thinking (1-2)
Prerequisite: Credit or concurrent registration in Mathematics 210.

Children's mathematical thinking and in-depth analyses of children's understanding of operations (addition, subtraction, multiplication, and division) and place value. Students will observe individual children solving mathematics problems. Real, compact disc, and/or web-based experience included.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

# Mechanical Engineering 

OFFICE: Engineering 326
TELEPHONE: 619-594-6067
E-MAIL: mech.engineering@sdsu.edu
WEBSITE: http://mechanical.sdsu.edu
The undergraduate program in Mechanical Engineering is accredited by the Engineering Accreditation Commission (EAC) of ABET, http://www.abet.org.

## Faculty

Emeritus: Bailey, German, Hoyt, Hussain, Impelluso, Lybarger, Mansfield, Murphy
Chair: Abraham
Professors: Abraham, Beyene, Bhattacharjee, Kassegne, Kline, May-Newman, Moon, Morsi, Olevsky
Associate Professors: Miller, Youssef
Assistant Professors: Bhalla, Camacho, Kang, Katira, Naseradinmousavi, Park, Wood, Xu, Yang

## Offered by the Department

Doctor of Philosophy degree in engineering sciences: (bioengineering), (electrical and computer engineering), (mechanical and aerospace engineering), (structural engineering).
Master of Engineering.
Master of Science degree in bioengineering.
Master of Science degree in mechanical engineering.
Major in mechanical engineering with the B.S. degree.
Emphasis in bioengineering.

## Transfer Credit

No credit will be given for upper division engineering coursework taken at an institution having an engineering program which has not been accredited by the Engineering Accreditation Commission (EAC) of ABET, unless the student successfully completes the first 12 units of engineering work attempted at this university. At that time, and upon recommendation of the department, credit will be given for the unaccredited work.

## The Major

Global engineering challenges include the pressing need to deliver healthcare effectively and efficiently, generate and deliver clean energy and water, and make the environment that we live in sustainable. Mechanical engineers are actively involved in finding solutions to address these challenges. Finding solutions requires the integration of science, engineering, and socioeconomic knowledge. Mechanical engineering students study a broad range of topics to prepare them for successful engineering careers. Upon graduation, mechanical engineering students will be able to apply principles of basic science, engineering, and mathematics (including differential equations and multivariate calculus) to analyze and interpret data; analyze, design, model, and realize physical systems, components or processes; apply techniques, skills, and modern engineering tools necessary for engineering practice; collaborate on multidisciplinary teams; communicate effectively; design a system, component, or process to meet desired needs; design and conduct experiments; formulate, identify, solve engineering problems; identify contemporary issues; recognize the need for an ability to engage in life-long learning; understand impacts of engineering solutions in a global and societal context; understand professional and ethical responsibility; work professionally in both thermal and mechanical systems areas.

Jobs in mechanical engineering include designing farm equipment to improve crop yield throughout the world, developing systems for biological research as well as lifesaving medical equipment, developing products to generate efficient energy sources that minimize environmental impact, and improving air and water
quality. A mechanical engineer, now more than ever, is someone who can translate scientific theories into real products and processes to improve the quality of life.

Design methodology and design projects are integrated throughout the curriculum, culminating in a capstone design experience in the senior year where students work on a design project as part of a design team.

The emphasis in bioengineering prepares students for employment in industry, or for higher professional degrees in bioengineering, engineering, or medicine.

In addition to the majors in mechanical engineering with the B.S. degree and emphasis in bioengineering, the department offers two BS/MS $4+1$ degrees: The BS/MS 4+1 degree program with B.S. and M.S. in Mechanical Engineering and the BS/MS 4+1 degree program with B.S. in Mechanical Engineering and M.S. in Bioengineering. These degrees are for SDSU mechanical engineering students who wish to gain expertise in a specialization of mechanical engineering or bioengineering prior to employment in industry, government, or as preparation for further training.

## Program Educational Objectives

The educational objectives of the mechanical engineering program are to prepare students who, after they graduate with a Bachelor of Science degree, are committed to:

1. Applying an open-minded but critical approach to the analysis of problems and the design of innovative and sustainable engineering solutions while employed in industry, government organizations, research and development, or in entrepreneurial efforts (professional practice);
2. Actively participating in ongoing professional development opportunities (professional development);
3. Conducting themselves responsibly, professionally, and ethically with a broad appreciation of the world and the role that engineering plays in society (service and citizenship).

## Retention Policy

The engineering program expects all majors will make reasonable academic progress toward the degree. Engineering premajors who have either (1) completed major preparatory courses, earned 60 units, but have less than a 2.7 cumulative GPA; or (2) earned 60 units but have not completed major preparatory courses and/or have less than a 2.7 cumulative GPA may be removed from the premajor and placed in undeclared.

## Impacted Program

The mechanical engineering major is an impacted program. To be admitted to the mechanical engineering major, students must meet the following criteria:
a. Complete with a grade of $C(2.0)$ or better: Mechanical Engineering 200 [or Aerospace Engineering 200]; Chemistry 202 (or 200); Mathematics 150, 151; Physics 195, 196. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Have an overall cumulative GPA of 2.7.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Mechanical Engineering Major

With the B.S. Degree

## (Major Code: 09101) (SIMS Code: 447001)

This program requires 138 units to include general education. In addition, the total number of units specified in each elective category represents a minimum requirement.

All students in mechanical engineering pursue a common program of basic sciences, engineering, and mechanical engineering fundamentals. Students are provided with the opportunity to select a pattern of study to satisfy their areas of interest. This pattern of study is indicated in the sequence known as "professional electives" and may be selected from available courses in controls, energy conversion, gas dynamics, heat transfer, machine design, materials, thermodynamics, vibrations, and other areas.

Students must complete all upper division courses in the major within seven years prior to graduation. Students who will have completed any of those courses more than seven years before the projected date of graduation must contact the department chair for information about ways to certify knowledge of current course content.

Preparation for the Major. Mechanical Engineering 190, 200 [or Aerospace Engineering 200], 202, 220 [or Aerospace Engineering 220], 240, 241; Aerospace Engineering 280; Biology 100 or 101; Chemistry 202 (or 200); Electrical Engineering 204; Mathematics 150, 151, 252; Physics 195, 195L, 196, 196L, 197. (51 units)

The following courses: Mechanical Engineering 200 [or Aerospace Engineering 200]; Chemistry 202 (or 200); Mathematics 150, 151; Physics 195, 196 must be completed with a grade of $C$ (2.0) or better. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ).

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 48 upper division units to include Mechanical Engineering 304 (or Civil Engineering 301), 310, 314, 330, 350, 351, 360, 452, 490A, 490B, 495, 520, 555; Aerospace Engineering 341. Professional electives: Nine units of additional coursework may be selected from any 400- or 500-level mechanical engineering course, Aerospace Engineering 515, 535 [or Mechanical Engineering 535], or approved courses from other departments.

Master Plan. The master plan provides an advising record for mechanical engineering majors and should be initiated by the student with their faculty adviser during the second semester of the freshman year. All students must have a master plan on file in the department prior to enrollment in Mechanical Engineering 310. The master plan must be reviewed each semester with the faculty adviser before registration. All course substitutions must be approved by the department chair.

## Emphasis in Bioengineering

## (SIMS Code: 447002)

This program requires 138 units to include general education. In addition, the total number of units specified in each elective category represents a minimum requirement.

Preparation for the Major. Mechanical Engineering 190, 200 [or Aerospace Engineering 200], 202, 220 [or Aerospace Engineering 220], 240, 241; Aerospace Engineering 280; Biology 203; Chemistry 202 (or 200); Electrical Engineering 204; Mathematics 150, 151, 252; Physics 195, 195L, 196, 196L. Three to five units selected from: Biology 212, Chemistry 201, Chemistry 232 and Chemistry 232L, or Physics 197. (51-54 units)

The following courses: Chemistry 202 (or 200); Mathematics 150, 151; Physics 195, 196; Mechanical Engineering 200 [or Aerospace Engineering 200] must be completed with a grade of C (2.0) or better. These courses cannot be taken for credit/no credit (Cr/ NC ).

General Education. Students with this emphasis are required to take Biology 336 to satisfy three units of upper division Natural Sciences, IV.A.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or above or completing one of the approved upper division writing courses (W) with a grade of $C(2.0)$ or better. See "Graduation Requirements" section for a complete listing of requirements.
Major. A minimum of 51 upper division units to include Mechanical Engineering 304 (or Civil Engineering 301), 310, 314, 330, 350, 351, 360, 452, 490A, 490B, 499 (three units), 520, 555, 580, 585; Aerospace Engineering 341; Biology 336, 436. Biology 336 will also satisfy three units of the General Education requirement in IV.A.

## BS/MS 4+1 Degree Program

## B.S. and M.S. in Mechanical Engineering (SIMS Code: 447012)

Students must complete 159 units to be simultaneously awarded the B.S. degree in mechanical engineering and the M.S. degree in mechanical engineering. Students can apply for admission to the BS/MS 4+1 (B.S. and M.S. in Mechanical Engineering) degree program when they have successfully completed a minimum of 90 units or a maximum of 115 units. These units must count towards one or the other of the two SDSU degree programs (BS or MS) that will ultimately be awarded in the dual degree program. All students must have a satisfactory score [minimum of 308 for combined verbal and quantitative on the Graduate Record Examination (GRE) General Test] and a minimum overall GPA of 3.0.

To satisfy the requirements for the BS/MS 4+1 degree program (B.S. and M.S. in Mechanical Engineering), students must achieve at least a 3.0 average in the 30 units of courses used to satisfy the graduate program of study. Of the 30 units, a maximum of nine units may be in 500-numbered mechanical engineering electives and all other program requirements must be satisfied. Three 500level courses may be used to fulfill the elective requirements for the $4+1$ BS/MS degree program (B.S. and M.S. in Mechanical Engineering) at the same time as serving as prerequisite courses for graduate study. The BS/MS 4+1 degree program (B.S. and M.S. in Mechanical Engineering) allows students to use any three 500-level M E courses toward their graduate degree. Students in the BS/MS 4+1 degree program (B.S. and M.S. in Mechanical Engineering) must follow the thesis option. Upon successful completion of the BS/MS 4+1 degree program, students will receive the B.S. degree in mechanical engineering and M.S. degree in mechanical engineering.

## BS/MS 4+1 Degree Program

B.S. in Mechanical Engineering and M.S. in Bioengineering

## (SIMS Code: 447013)

Students must complete 159 units to be simultaneously awarded the B.S. degree in mechanical engineering and the M.S. degree in bioengineering. Students can apply for admission to the BS/MS 4+1 degree program (B.S. in Mechanical Engineering and M.S. in Bioengineering) when they have successfully completed a minimum of 90 units or a maximum of 115 units. These units must count towards one or the other of the two SDSU degree programs (BS or MS) that will ultimately be awarded in the dual degree program. All students must have a satisfactory score [minimum of 308 for combined verbal and quantitative on the Graduate Record Examination (GRE) General Test] and a minimum overall GPA of 3.0.

To satisfy the requirements for the BS/MS 4+1 degree program (B.S. in Mechanical Engineering and M.S. in Bioengineering), students must achieve at least a 3.0 average in the 30 units of courses used to satisfy the graduate program of study. Of the 30 units, a maximum of nine units may be in 500-numbered mechanical engineering electives and all other program requirements
must be satisfied. Three 500-level courses may be used to fulfill the elective requirements for the BS/MS $4+1$ degree program at the same time as serving as prerequisite courses for graduate study. For the BS/MS 4+1 degree program (B.S. in Mechanical Engineering and M.S. in Bioengineering), students must take M E 580 and 585 for the biomechanics specialization; M E 580, 540 or 543 , and 585 for the biomaterials specialization. The bioinstrumentation specialization is not open to students in the BS/ MS 4+1 degree program (B.S. in Mechanical Engineering and M.S. in Bioengineering). Upon successful completion of the BS/MS 4+1 degree program, students will receive the B.S. degree in mechanical engineering with an emphasis in bioengineering and M.S. degree in bioengineering.

## Courses (ME)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

## M E 101. Solid Modeling I (2)

Six hours of laboratory.
Introduction to 3-D computer-aided mechanical design. Creation of basic to intermediate solid parts, assemblies, and drawings to include orthographic, pictorial, section, and detail views. Dimensioning, dimensional tolerancing, and thread notation per ASME Y14.5M-1994. CREO and SolidWorks software.

## M E 102. Solid Modeling II (2)

Six hours of laboratory.
Prerequisite: Mechanical Engineering 101.
Continuation of 3-D computer-aided mechanical design. Creation of advanced solid parts, assemblies, and drawings. Standard fits and geometric tolerancing per ASME Y14.5M-1994. CREO and SolidWorks software. Finite element analysis of mechanical components using CREO and SolidWorks simulation software. Computer numerical controlled manufacturing using HSMWorks software.

## M E 190. Computer-Aided Design (2)

One lecture and three hours of laboratory.
Introduction to 3-D computer-aided mechanical design. Creation of basic to intermediate solid parts, assemblies, and drawings to include orthographic, pictorial, section, and detail views. Dimensioning, dimensional tolerancing, and thread notation per ASME Y14.5M-2009. SolidWorks software. Not open to students with credit in Mechanical Engineering 102.

## M E 200. Statics (3)

(Same course as Aerospace Engineering 200)
Prerequisites: Mathematics 150 and Physics 195 with a grade of C (2.0) or better in each course. Proof of completion of prerequisites required: Copy of transcript.

Force systems, equilibrium, structures, distributed forces, friction, virtual work, moments of inertia, vector algebra.
M E 202. Computer Programming and Applications (3)
Two lectures and three hours of activity.
Prerequisite: Mathematics 151.
Principles of programming using Matlab. Syntax topics to include arrays, control flow, data types, functions, and loops. Numerical methods to include curve fitting, Gauss reduction, interpolation, matrix operations, Newton-Raphson, numerical differentiation, and numerical integration. Matlab implementations. Application areas in mechanical engineering to include dynamic systems, finite element analysis, graphical user interfaces, and image analysis.

## M E 220. Dynamics (3)

## (Same course as Aerospace Engineering 220)

Prerequisites: Mechanical Engineering 200 [or Aerospace Engineering 200] and Mathematics 151 with a grade of $C$ (2.0) or better in each course. Proof of completion of prerequisites required: Copy of transcript.

Kinetics of a particle; central force motion; systems of particles; work and energy; impulse and momentum; moments and products of inertia; Euler's equations of motion; vibration and time response; engineering applications.

M E 240. Introduction to Engineering Materials (3)
Prerequisite: Chemistry 202 (or 200). Proof of completion of prerequisite required: Copy of transcript.

Atomic and molecular structure of materials utilized in engineering. Analysis of the relationships between structure of materials and their mechanical, thermal, electrical, corrosion, and radiation properties. Examples of material structure relevant to civil, electrical, aerospace, and mechanical engineering applications.

## M E 241. Materials Laboratory (1)

Three hours of laboratory.
Prerequisite: Mechanical Engineering 240.
Experimental methods used to characterize engineering materials and their mechanical behavior.

## M E 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
NOTE: Proof of completion of prerequisites required for all Mechanical Engineering 300-, 400-, and 500-level courses: Copy of transcript.

## M E 304. Mechanics of Materials (3)

Prerequisite: Mechanical Engineering 200 [or Aerospace Engineering 200] or Civil Engineering 225 with a grade of $C$ (2.0) or better.

Concepts of stress and strain. Generalized Hooke's law. Formulations for axial, shear, bending, torsion, and combined stresses applied to tension members, pinned joints, beams, and shafts. Euler buckling criteria for columns. Energy methods. Not open to students with credit in Civil Engineering 301.

## M E 310. Engineering Design: Introduction (3)

Two lectures and three hours of guided design activities.
Prerequisites: Mechanical Engineering 190, 202, and 220 [or Aerospace Engineering 220]. Every mechanical engineering student must have a master plan on file before enrolling in Mechanical Engineering 310.

Professional approach to engineering design problems. Problem definition, information gathering, feasibility studies, analysis, final design and communication. Several design studies and projects are completed.
M E 314. Engineering Design: Mechanical Components (3)
Prerequisites: Mechanical Engineering 190, 202, 241, 304 (or Civil Engineering 301).

Application of mechanics, physical properties of materials, and solid mechanics to the design of machine elements. Student design projects.

## M E 330. Mechatronics Laboratory (3)

Two lectures and three hours of laboratory.
Prerequisites: Mechanical Engineering 202, 220 [or Aerospace Engineering 220]; Electrical Engineering 204; Aerospace Engineering 280 and Physics 196L.

Actuating devices, data acquisition systems, hardware controllers, machine and process control applications, sensors and transducers, transducer signal processing and conditioning.

## M E 350. Thermodynamics (3)

Prerequisites: Mechanical Engineering 200 [or Aerospace Engineering 200] or Civil Engineering 225; Mathematics 252.

Basic concepts and principles of thermodynamics with emphasis on simple compressible substances. First and second law analysis, entropy, exergy analysis and state relations. Not open to students with credit in Mechanical Engineering 352.

## M E 351. Engineering Thermodynamics (3)

Prerequisite: Mechanical Engineering 350.
Analysis and design of gas and vapor power cycles, and refrigeration systems. Generalized property relations for gases and gas-vapor. Air-conditioning. Combustion and chemical equilibrium. Design of engineering systems and processes.

## M E 360. Fluids Engineering (3)

Prerequisites: Mechanical Engineering 220 [or Aerospace Engineering 220] and Aerospace Engineering 280.

Fluid mechanics with applications to mechanical engineering systems. Statics and dynamics of fluids. Conservation laws of mass, momentum and energy analysis in control volume and differential form. Real life applications of these fundamental concepts and systems to include turbomachinery. Not open to students with credit in Aerospace Engineering 340.

## M E 420. Fundamentals of Manufacturing (3)

Prerequisite: Mechanical Engineering 314.
Applications of mechanics of materials and systems in product design and fabrication. Design challenges and constraints of various fabrication technologies. Fabrication technologies and processes.

## M E 430. System Modeling and Analysis (3)

Prerequisite: Mechanical Engineering 330.
System-level lumped parameter modeling of dynamic systems using first principles. Predict performance of engineered systems based on its dynamic response. Feedback control to achieve closed loop stability and specified system performances.

## M E 452. Principles of Heat Transfer (3)

Prerequisites: Mechanical Engineering 350 and 360.
Analytical and numerical solutions of steady and transient oneand two-dimensional conduction problems, forced and natural convection in external and internal flows, and thermal radiation. Applications.

## M E 490A. Engineering Design: Senior Project (3)

One lecture and six hours of guided design activities.
Prerequisites: Mechanical Engineering 304 (or Civil Engineering 301), 310, 314, 452. Every mechanical engineering student must have a master plan on file before enrolling in Mechanical Engineering 490A.

Applications of engineering principles and design techniques to the designing, building, and testing of an engineering system. Part one of a single project is completed in this two-course sequence and is judged completed upon presentation of an oral and a written report. In addition, issues related to ethics and engineering practice are discussed.

## M E 490B. Engineering Design: Senior Project (3)

One lecture and six hours of guided design activities.
Prerequisites: Mechanical Engineering 490A and 495.
Applications of engineering principles and design techniques to the designing, building, and testing of an engineering system. Part two of a single project is completed in this two-course sequence and is judged completed upon presentation of an oral and a written report. In addition, issues related to ethics and engineering practice are discussed.
M E 495. Mechanical and Thermal Systems Laboratory (2) One lecture and three hours of laboratory.
Prerequisites: Mechanical Engineering 310, 330, 351, 452.
Data acquisition theory, instrumentation, sensors, data reduction, statistical and uncertainty analysis, and design of experiments. Experience in designing, performing, and reporting experiments on mechanical and thermal systems, mechanisms, vibrations, structures, thermodynamics, heat transfer.
M E 496. Advanced Mechanical Engineering Topics (1-3) Prerequisite: Consent of instructor.
Modern developments in mechanical engineering. See Class Schedule for specific content. Maximum credit nine units for any combination of Mechanical Engineering 496, 499 and 596.

## M E 499. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit nine units for any combination of Mechanical Engineering 496, 499 and 596.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
NOTE: Proof of completion of prerequisites required for all Mechanical Engineering 300-, 400-, and 500-level courses: Copy of transcript.
M E 520. Introduction to Mechanical Vibrations (3)
Prerequisites: Mechanical Engineering 304 (or Civil Engineering 301) and Mechanical Engineering 330.

Analysis of mechanical vibration; single- and multi-degree of freedom systems; free and forced vibrations; vibration isolation; vibration absorbers. Theory of vibration measuring instruments.

## M E 530. Automatic Control Systems (3)

Prerequisite: Mechanical Engineering 330.
Dynamic characteristics of control components and systems. Stability and response of closed loop systems. Design of control systems.

## M E 532. Robot Modeling and Control (3)

Prerequisite: Mechanical Engineering 330.
Analysis, computer programming, modeling, motion planning, and design of control systems for robots.

## M E 535. Mechanics of Composite Structures (3)

(Same course as Aerospace Engineering 535)
Prerequisites: Aerospace Engineering 280 and Aerospace Engineering 310 or Mechanical Engineering 314.

Micro- and macro-mechanics of composite materials, classical lamination theory, initial failure prediction and progressive failure analysis of laminates, analysis of beam and plate structures, stiffness and strength based design of composites.

## M E 540. Mechanics of Polymers (3)

Prerequisite: Mechanical Engineering 314.
Polymeric materials, mechanics, and properties. Mechanical mechanics and properties essential for design. Stress-Strain behavior theories and models to include hyperelasticity and viscoelasticity. Design and analysis methodologies and techniques.

## M E 543. Powder-Based Manufacturing (3)

Prerequisite: Mechanical Engineering 240.
Manufacturing of micro and nano-structured engineering components and composites starting with metal and/or ceramic powders. Powder production methods, characterization, powder shaping and compaction, sintering, hot consolidation, design considerations, and finishing operations.
M E 552. Heating, Ventilating, and Air-Conditioning (3)
Prerequisites: Mechanical Engineering 351 and 452.
Fundamentals of air conditioning processes, psychrometrics, and building cooling load calculations. Design and analysis of HVAC systems. Equipment selection. Design codes and standards. Computerized cooling load calculations.

## M E 554. Automotive Power (3)

Prerequisites: Mechanical Engineering 351 and 452.
Conventional and emerging energy conversion devices for automotive applications to include fuel-cell, hybrid, and internal combustion engines. Alternative fuels to include biofuels, cleaner fossil fuels, hydrogen, and natural gas. Well-to-wheel energy and cost analysis of prime mover designs/fuels.
M E 555. Energy and Thermal Systems Analysis and Design (3) Prerequisites: Mechanical Engineering 351 and 452.
Analysis, design, and optimization of thermal systems using microcomputers. Modeling of thermal systems and components. Thermal system component characteristics and their effect on overall system performance. Relationship among thermal sciences in design process. Introduction to thermoeconomic optimization.

## M E 556. Solar Energy Conversion (3)

Prerequisites: Mechanical Engineering 351 and 452.
Application of thermodynamics, fluid mechanics and heat transfer to the thermal design of solar energy conversion systems. Computer simulations utilized.

## Mechanical Engineering

## M E 580. Biomechanics (3)

Prerequisites: Mechanical Engineering 304 (or Civil Engineering 301) and 360 .

Application of engineering methodologies for quantitative understanding of biological/physiological phenomena. Continuum mechanics principles. Cardiovascular system and its components viewed from a mechanistic standpoint.

## M E 585. Fundamentals of Micro-Electro-Mechanical

## Systems (MEMS) (3)

One lecture and four hours of laboratory.
Prerequisites: For aerospace engineering majors: Mechanical Engineering 220 [or Aerospace Engineering 220], Electrical Engineering 204, and Mechanical Engineering 240. For electrical engineering majors: Electrical Engineering 330 and Mechanical Engineering 240. For mechanical engineering majors: Mechanical Engineering 240 and Mechanical Engineering 220 [or Aerospace Engineering 220].

Microfabrication techniques, microsensors and microactuators, and scaling laws. A design project of a micro-device including schematic creation, test of performance, layout generation, and layout versus schematic comparison.

## M E 596. Advanced Mechanical Engineering Topics (1-3)

Prerequisite: Consent of instructor.
Modern developments in mechanical engineering. May be repeated with new content. See Class Schedule for specific content. Maximum credit of nine units for any combination of Mechanical Engineering 496, 499 and 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

OFFICE: Exercise and Nutritional Sciences 451
TELEPHONE: 619-594-4943 / FAX: 619-594-7084
Faculty
Chair: Parlette
Professor: Parlette
Senior Military Science Instructor: Reinhardt
Assistant Professors: Cruz, Serrano, Tshuma

## Offered by the Department

Army ROTC curriculum leading to a commission as a second lieutenant in the US Army.
Minor in military science.

## Curriculum

The Department of Military Science offers a two, three, and four-year Army Reserve Officers Training Corps (ROTC) program designed to develop future officers in the areas of leadership, management, foreign policy, national security, military history, and military skills. The Army ROTC program also offers a series of optional adventure outings and on-campus activities during the school year. These include orienteering, rappelling, sports programs and social activities. Enrollment in the Army ROTC program is not a requirement for taking military science courses. The Military Science Department offers a varied class schedule to meet students' requirements.

The Army ROTC program consists of one course per semester along with scheduled leadership laboratories and field training. The four-year program is divided into two parts: the basic course and the advanced course. The basic course is usually taken in the freshman and sophomore years. No military commitment is incurred during this time, and students may withdraw at any time through the end of the second year. The first year consists of three-unit introductory courses each semester. The second year consists of three-unit courses with instruction on organizational leadership theories. Necessary military science textbooks and materials are furnished without cost.

After completing the basic course, students who have demonstrated officer potential, have met physical and scholastic standards and agree to contract are eligible to enroll in the advanced course. This course is normally taken in the final two years of college and consists of outlined military science and designated enrichment courses that include communication skills, military history, and computer literacy. In addition, the advanced course consists of a paid five-week Cadet Leaders Course (CLC) held during the summer between the junior and senior years. This Cadet Summer Training Camp permits students to put into practice the leadership principles and theories acquired in the classroom. All students in the advanced course receive uniforms, necessary military science textbooks, pay for the Advanced Camp, and a living allowance of up to $\$ 4,000$ each school year.

Upon completion of the advanced course, students are commissioned Second Lieutenants in the US Army. The available options after commissioning are active duty for a minimum of three years or three months active duty for training followed by part-time participation in the US Army Reserve or US Army National Guard.

Several special programs are available for students who have previous ROTC training or active military service. These programs allow for part- or full-placement credit for the basic course. In addition, a program is available for simultaneous participation in both Army ROTC and the Army Reserve or Army National Guard.

## Two-Year Commissioning Program

This program offers students the opportunity to be commissioned officers after two years of Army ROTC instead of four years. The two year program is designed for community and junior college graduates and students who did not take Army ROTC during their first two years or who have prior military experience. The five-week Cadet Basic Camp provides the military skills and leadership training normally taught during the freshman and sophomore on-campus courses. CIET is conducted at Fort Knox, Kentucky, and a paid salary, transportation, meals, and lodging will be furnished. CIET graduates enroll in Military Science 301 to enter the advanced course.

## Cross Enrollment

Students can participate in Army ROTC while attending any other college or university in San Diego County. For further information concerning cross enrollment, contact the Department of Military Science at 619-594-4943.

## Applying for the Program

SDSU students enroll in military science courses by signing up during registration in the same manner as for other university classes. There is no advance application needed for the freshman or sophomore classes. Students need to contact the Department of Military Science to enroll in the Army ROTC program and to receive information on lab schedules and activities.

Students enrolling in other area colleges and universities need to contact the Department of Military Science at SDSU for curriculum requirements and application procedures at 619-594-4943.

## Financial Assistance

All students have the opportunity to compete for two, three, and four-year scholarships. These scholarships cover all tuition, laboratory, and book fees, and a \$420 monthly subsistence allowance during the school year. Scholarship applications are processed by the Department of Military Science. In addition, two-year scholarships are available at the CIET at Fort Knox, Kentucky, where you will be in competition only with the students attending the camp. Contact the department chair for details. Paid positions (part-time) are available through simultaneous membership in local reserve and National Guard units.

## Military Science Minor

## (Minor Code: 30009) (SIMS Code: 664901)

The minor in military science consists of a minimum of 18 to 20 units to include Military Science 301, 302, 401, 402; and a minimum of six to eight units selected from a critical foreign language such as Arabic, Persian, or Russian.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Courses (MIL S)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

MIL S 96. Leadership Laboratory (1) Cr/NC
Application of individual skills and military tasks appropriate to a small unit leader. Prepares cadets for higher level leadership positions. Emphasis is on performance in leader roles which includes instruction. Maximum credit eight units. Credit earned in this course not applicable to a bachelor's degree.
MIL S 101. Leadership and Personal Development (3)
Structure, organization, and missions of US Army. Preparation and development for officer status.
MIL S 102. Introduction to Tactical Leadership (3)
Officer leadership, development, and functions. Emphasizing command responsibilities for basic foundation of military fundamentals.

## MIL S 110. United States Military History (3)

Analyze decisions made by American military leaders. Military engagements from colonial period through current operating environment. Principles of war and reviews of decisions affecting outcomes.

## MIL S 201. Innovative Team Leadership (3)

Scientific approach to leadership theory and its applicability to military settings through study of human behavior and leadership models at individual and group levels using simulations, case studies, and diagnostic instruments.
MIL S 202. Foundations of Tactical Leadership (3)
Leadership at organizational level with application to military settings with emphasis on developing leader skills and examination of theories and concepts of civil-military relations, using simulations, case studies, and diagnostic instruments.

## MIL S 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## MIL S 299. Special Study (1-4)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

MIL S 301. Adaptive Tactical Leadership (3)
Prerequisite: Equivalent of two-year basic course program.
Techniques and skills required of military leaders. Military methods of instruction, review of essential map reading skills and case studies of military leadership techniques.

## MIL S 302. Leadership in Changing Environments (3)

Prerequisite: Equivalent of two-year basic course program.
Current tactical doctrine and military techniques of planning and coordination required to apply doctrine to small unit operations.
MIL S 401. Developing Adaptive Leaders (3)
Prerequisites: Military Science 301 and 302.
Leadership and management problems encountered in a midlevel sized organization. Role of junior officer. Prepares senior cadets for positions as leaders and managers of resources at platoon/company level.
MIL S 402. Leadership in a Complex World (3)
Prerequisites: Military Science 301 and 302.
Military justice system as it has evolved from international law principles and established national security policies. History of military law, philosophy and structure of system to include court-martial ethics and decision-making.

MIL S 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## MIL S 499. Special Study (1-3)

Prerequisite: Consent of department chair.
Individual study. Maximum credit six units.

OFFICE: Music 112*
TELEPHONE: 619-594-6031 / FAX: 619-594-1692
E-MAIL: music.dance@sdsu.edu

## Faculty

Emeritus: Almond, Barra, Biggs, Chambers, Dutton, Estes,
Forman, Friedrichs, Helzer, Kolar, Liebowitz, McDonald,
Meadows, Mitchell, O’Donnell, Peterman, Sheldon, Stauffer
Director: Lipscomb
Professors: Conaty, Follingstad, Lipscomb, Rewoldt, Smigel, Waters, Yeager
Associate Professors: Aziz, Delgado, Kitelinger, Thompson
Assistant Professors: Khaefi, Koner, Potter, Warren
Lecturers: Ayres, Bolzenthal, Nielsen, Nikkel, Soukup, Starr
Applied Music Instruction
Bassoon: Martchev, V.
Cello: Greenbaum, Zhao
Chamber Music: Hausmann Quartet
Clarinet: Renk
Classical Guitar: Bassett, Benedetti, Wetzel
Composition: Dutton, Waters
Double Bass: Kurtz-Harris, Magnusson
Euphonium: Starr
Flute: Martchev, P.
Harp: Mashkovtseva
Horn: McCoy
Jazz Guitar: Boss
Jazz Studies: Soukup, Thompson, Yeager
Non-Western Instruments: Specialists from specific cultures as
available each semester
Oboe: Conaty, Skuster
Percussion: Cohen, Weller, Whitman
Piano: Follingstad, James
Saxophone: Rewoldt, Rekevics
Trombone: Starr
Trumpet: Cannon, Wilds
Tuba: Dutton
Viola: Chen, Maril
Violin: Allen, Tsai
Voice: Ayres, Bolzenthal, Nikkel

## Offered by the School of Music and Dance

Master of Arts degree in music.
Master of Music degree.
Major in music with the B.A. degree in liberal arts and sciences.
Bachelor of Music degree in applied arts and sciences.
Teaching major in music in preparation for the single subject teaching credential. See Teacher Education.
Minor in music.
Certificate in performance.
Certificate in artist diploma, advanced
(refer to the Graduate Bulletin).

## The Major

Music serves to enhance the lives of all people and provides a challenging avenue of creative expression for those who wish to pursue its serious study.

The Bachelor of Music program is for those students who have professional ambitions in music performance, public school teaching, composition, jazz studies, as a music generalist or seek a foundation for graduate study leading to college or university teaching or research positions. This program strongly emphasizes the professional aspects of music. The Bachelor of Music degree with a specialization in Music Education leads to the California Single Subject Teaching Credential.

Performance is the most obvious and frequent use of the musician's skill. However, graduates may also teach, compose, review, sell, and record music. In addition, inventing, constructing, tuning, and repairing instruments requires skills that are based on understanding the fundamentals of music. Some of the positions that a music graduate might hold include studio instructor; teacher in public or private schools; researcher for libraries, publishers, and museums; music therapist; recording artist, composer, or arranger, professional musician with an orchestra, band, or opera company, or arts management professional.

The Bachelor of Arts degree is a liberal arts degree for those students who seek broad understanding of and an intimate orientation to the discipline of music without professional goals.

Several Music Minor options are available for those students whose primary interest is in another department.

## Advising

All music majors are required to consult with their music faculty adviser as soon as possible; they are required to meet with their faculty adviser within the first two semesters after acceptance or transfer into the major.

## Impacted Program

The music major is an impacted program. To be admitted to the music major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.
d. For professional studies (e), track 1, music entrepreneurship and business specialization, students must have a cumulative GPA of 2.9 or better. Music 205B and Accountancy 201 must be completed with a grade of $C$ (2.0) or better. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ).
To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Music Curricula

## General Basic Requirements

1. All new students and transfer students who wish to enroll as music majors or minors are given placement examinations in music theory and piano and auditions on their major instrument. (Students wishing to be considered for global composition must submit a portfolio of compositions. Please contact the composition faculty directly for the contents of the portfolio. Students wishing to be considered for professional studies: music recording technology and audio design must submit a portfolio of audio projects. Please contact the composition faculty directly for the contents of the portfolio.) As a result of these placement examinations, students will be directed to enroll in one or more of the following: Music 105, 106A, 106B, 205A, 205B, 206A, 206B, 305A, 305B, 405A, 405B; Music 250, 251, 450, and 451 with the appropriate letter suffix; and Music 110A-110B, 210A-210B.
2. Each semester of private instruction concludes with a solo performance before a faculty jury.
3. To qualify for upper division study, music majors must pass a Junior Level Examination.
4. A final grade of $C(2.0)$ or better is required in each semester of the CM courses in order to advance to the next higher course.
5. Students must participate in at least one major ensemble each semester of enrollment. Please see each degree program and specialization for specific unit requirements. Refer to the Music Student Handbook for specific requirements.
6. Attendance at and performance in recitals is a requirement of all music majors. Freshmen must meet ushering requirements. Refer to the Music Student Handbook for detailed information.

## Statement on Computers

Students must become competent in the operation of personal computers to include word processing software, presentation software, web-based applications, and music notation software. Students, especially those planning to pursue Global Composition are encouraged to own a Macintosh laptop computer capable of running sophisticated music notation/composition software. For additional information regarding suggested platform and software, contact the School of Music and Dance.

## Electives in Music - Nonmajors

The School of Music and Dance offers certain courses for students who are interested in music as an elective study area for the enrichment of their cultural background. Courses particularly suited for these needs are Music 102, 151, 345, 351, and the music ensemble courses numbered 170 through 189 and from 370 to 389. Some students will be musically prepared to elect courses which may or may not be included in this group. Enrollment by qualified students who wish to elect these courses is encouraged.

Opportunities to participate in instrumental and vocal ensembles are also available to non-music majors. Music ensemble courses may be repeated. A maximum credit of 14 units of ensemble courses (Music 170-189, 370-389, 570-589) may be counted toward a bachelor's degree for nonmajors.

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Music Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 10051) (SIMS Code: 665304)
All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in music courses can apply to the degree.

A minor is required with this major.
Preparation for the Major. Music 105 (or passing placement examination), 106A, 106B, 110A-110B, 151; three units selected from courses numbered 170-189; Music 205A, 205B; four units of Music 251. (20-23 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of $C$ (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 24 upper division units to include Music 305A, 305B, 308A, 308B, 347, 451 (two units); four units selected from courses numbered 370-389; 408A, and two units of upper division music electives.

## Music Major

With the Bachelor of Music Degree in Applied Arts and Sciences (Major Code: 10041)

All candidates for a bachelor of music degree must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." The maximum number of units in upper division music courses acceptable toward the Bachelor of Music degree is 70 .

A minor is not required with this major.
Preparation for the Major. All majors must fulfill the requirements in one of the following areas of specialization.
a. Music Education (SIMS Code: 665306). Music 105 (or passing placement examination), 106A, 106B, 110A-110B, 151, 204, 205A, 205B, 206A-206B, 210A-210B, 212, 214, 215, 216, 217, 218, 246A, 246B; four units selected from music courses numbered 170 through 189; four units of Music 251. (36-39 units)
b. Performance (SIMS Code: 665381). Music 105 (or passing placement examination), 106A, 106B, 110A-110B, 151, 205A, 205B, 206A-206B, 210A-210B; six units selected from courses numbered 170 through 189; 12 units of Music 250. (Vocal majors must take Music 243. Keyboard majors take Music 211A-211B rather than Music 210A-210B.) (33-39 units)
c. Global Composition (SIMS Code: 665362). Music 105 (or passing placement examination), 106A, 106B, 110A-110B, 151, 160, 166; four units from courses numbered Music 170 through 189; Music 205A, 205B, 206A-206B; two units of Music 207; Music 210A-210B; two units of Music 251L; Music 260, 266. (33-36 units)
d. Jazz Studies (SIMS Code: 665378). Music 105 (or passing placement examination), 106A, 106B, 110A-110B, 151, 166, 204, 205A, 205B, 206A-206B, 266; six units selected from music courses numbered 170 through 189; six units of Music 251 (eight units if piano is primary instrument); two units of lower division music electives. (34-37 units) Students with piano as primary instrument are not permitted in Music 110A or 110B (must complete eight units of Music 251 to compensate).
e. Professional Studies.

Track 1 - Music Entrepreneurship and Business (SIMS Code: 665324): Music 105 (or passing placement examination), 106A, 106B, 110A-110B, 151, 205A, 205B, four units selected from music courses numbered 170 through 189; four units of Music 251, five units of lower division music electives. Accountancy 201; Communication 103; Economics 101 or 102; Journalism and Media Studies 210; one course selected from Economics 201, Statistics 119, or 250. (41-44 units)

Students must have a cumulative GPA of 2.9 or better. Music 205B and Accountancy 201 must be completed with a grade of $C$ (2.0) or better. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ).

Prior to enrolling in upper division Fowler College of Business courses, students must complete Accountancy 201, have earned a minimum of 60 units and must participate in the entrepreneurship minor workshop; students must earn a grade of $C$ (2.0) or better in Music 205B prior to enrolling in upper division music courses. School of Music and Dance, in consultation with the Fowler College of Business, will monitor completion of experiential component required in the entrepreneurship coursework.

Track 2 - General (SIMS Code: 665325): Music 105 (or passing placement examination), 106A, 106B, 110A-110B, 151, four units selected from music courses numbered Music 170 through 189; 204, 205A, 205B, 206A-206B, 210A-210B, four units of Music 251, six units of lower division music electives selected from: Music 170 through 189 (maximum four units), 160, 166, 212, 214, 215, 216, 217, 218, 243, 260, 266, or Music 290 [or Dance 290]. (32-35 units)

Track 3 - Music Recording Technology and Audio Design (SIMS Code: 665326): Music 105 (or passing placement examination), 106A, 106B, 110A-110B, 151, 162, four units selected from Music 170 through 189; 205A, 205B, two units of Music 207, 262, 290 [or Dance 290], Art 101, Art 103 or 240; Psychology 101; Computer Science 100 or 107. (37-40 units)

## Language Requirement.

1. Music Education - competency (equivalent to that which is normally attained in one semester of college study) in Spanish.
2. Performance - vocalists only - competency (equivalent to that which is normally attained in two years high school, or one semester of college study) in each of French, German, and Italian with a grade of $C(2.0)$ or better.
3. Jazz Studies, instrumental performance majors, and Professional Studies Track 1 - no language equivalency required.
4. Global Composition and Professional Studies Track 2 - competency (equivalent to that which is normally attained in one semester of college study) in French, German, Italian, or Spanish.
5. Professional Studies Track 3 - competency (equivalent to that which is normally attained in two semesters of college study) in French, German, Italian, or Spanish.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major.
a. Music Education. All candidates for a teacher credential must complete all requirements as outlined in this section of the catalog under Dual Language and English Learner Education or Teacher Education as an undergraduate major for the Bachelor of Music degree. Music 305A, 305B, 308A, 308B, 346, 347, 349, 405A, 405B, 408A, 408B, 446; four units selected from music courses numbered 370 through 389; three units of Music 451; Music 343 and three units of upper division music electives or six units of Music 554; one course selected from Music 345, 561. (45 units)
b. Performance. Music 305A, 305B, 308A, 308B, 347, 408A, 515; six units selected from courses numbered 370 through 389; 12 units of Music 450.
(Keyboard majors must include two units of Music 516; Music 541, 554.)
(String majors must include three units of Music 516; Music 541, 554.)
(Vocal majors must include two units of Music 516; Music 541, 543, 554.)
(Woodwind majors must include Music 516, 541, 554.)
(All other performance majors must include nine units of upper division electives.) (42-45 units)

All Bachelor of Music students in performance must perform a public solo junior recital comprised of one-half hour of music (normally given in the second semester of their junior year) and a public solo senior recital comprised of one hour of music (normally given in the second semester of their senior year).
c. Global Composition. Music 305A, 305B, 308A, 308B, 345, 347; four units of Music 360; four units selected from courses numbered 370 through 389; Music 405A, 405B, 408A; four units of Music 451L; Music 460; two units of Music 507, 560, 561. (48 units)

Students specializing in global composition are required to present a concert of their compositions during their senior year and present the scores of works to be performed to the music faculty no less than one month in advance of the performance.
d. Jazz Studies. Music 305A, 305B, 308A, 308B, 347, 364A-364B, 366, 408A, 466, 515, 566A-566B; six units selected from music courses numbered 370 through 389; eight units of Music 451; two units of upper division music electives. (46 units)
All Bachelor of Music students in jazz studies must perform a public junior recital comprised of one-half hour of music (normally given in the second semester of their junior year) and a public senior recital comprised of one hour of music (normally given in the second semester of their senior year).
e. Professional Studies.

Track 1 - Music Entrepreneurship and Business: Music 305A, 305B, 308A, 308B, 408A, 515, 518; two units selected from music courses numbered 370 through 389, six units of Music

530; 12 units of upper division music electives; Business Administration 350, Management 358, 460; one course selected from Business Administration 370 or Management 353, 455; one course selected from Hospitality and Tourism Management 330, Theatre 470 or 476; one course selected from Africana Studies 385 or Theatre 465. (57 units)
Track 2 - General: Music 305A, 305B, 308A, 308B, 345, 347, 349; four units selected from music courses numbered 370 through 389, 405A, 405B, 408A, 408B, two units of Music 451, two units of Music 554, 13 units of upper division music electives. (49 units)
Track 3 - Music Recording Technology and Audio Design: Music 305A, 305B, 308A, 308B, four units of Music 360, 408A, 460, six units of Music 530, 560, nine units of upper division music electives selected from Music 405A, 405B, 554, 561, one unit from music courses numbered 370 through 389; Theatre 548; one course selected from Art 344, Dance 371 or 471. (45-46 units)

## Performance Studies for Credit

Credit may be allowed for performance studies under the following conditions:

1. Properly enrolled Bachelor of Music majors may enroll for performance studies with resident faculty without an additional fee.
2. Students may under no circumstances change instructors in the middle of a semester without first securing the permission of the director of the School of Music and Dance.
3. Prior to the start of performance studies at San Diego State University, students are required to take a preliminary audition conducted by music faculty which will indicate status at the beginning of their studies.
4. Students who have dropped out of school or have stopped taking performance studies for credit for one semester or more, upon resumption of that instruction for credit are required to present another preliminary audition.
5. At the end of each semester, the School of Music and Dance will sponsor a jury examination to satisfy itself that its standards have been met.
6. Students enrolled in performance studies must be concurrently enrolled in the Comprehensive Musicianship program and class piano until such time as the CM and piano requirements are fulfilled.

## Music Minor

(Minor Code: 10051)
To be admitted to the minor program, the student must audition to demonstrate vocal or instrumental performing ability.

The minor in music consists of a minimum of 22 units in music selected from one of the following areas:

Electro-Acoustic Music (SIMS Code: 665321). Requirements include Music 105 (or passing placement examination), 110A-110B, 160, 207, 260, 360 ( 4 units), 460, 507 ( 2 units), 560, and submission of composition portfolio.

Elementary Music Education (SIMS Code: 665308). Requirements include Music 102, 110A-110B; two units selected from courses numbered 170 through 189; Music 205A, 205B; five units of Music 212, 214, 215, 216, 217, 218; Music 246A, 343, 345; two units selected from courses numbered 370-389; and two units of upper division music electives.

Students receive a strong multicultural component in Music 343 and 345.

Classical Music (SIMS Code: 665307). To be admitted to this area students must take a placement examination in comprehensive musicianship. Requirements include Music 105 (or passing placement examination), 110A-110B, 151; two units selected from Music 170-189; Music 205A, 205B; two units selected from Music 370-389; and eight units of upper division electives selected with the approval of the adviser.

Jazz Instrumental (SIMS Code: 665320). Requirements include Music 105 (or passing placement examination), two units each of Music 170 and 370; two units each of Music 189 and 389; Music 166, 205A, 205B, 266, 305A, 305B, 364A, 364B, 366, 466, 566A, 566B.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Performance Certificate <br> (SIMS Code: 665389)

The performance certificate serves to prepare preprofessional performance students who have not earned a university degree for professional careers by giving focused instruction in all areas of performance including performing technique, interpretation, repertoire, performing experience and knowledge of the business of professional performance.

Successful completion of an entrance audition and placement examinations are required for entrance to this certificate program. Applicants must also present a one-page statement of purpose, academic transcripts, and test scores that satisfy CSU eligibility requirements. Voice students must be at least 21 years of age.

Students must complete the following 33 unit program: Two to three units selected from Music 151, 308A, 308B, 408A, 408B; 170-189 (3 units); six units selected from Music 205A, 205B, 305A, 305B, 405A, 405B; six units of Music 250; three units selected from courses numbered 370 through 389; six units of Music 450; Music 515, 516 ( 2 units), 554 ; three to four units of music electives. Students must present a full-length qualifying solo recital at the end of their second semester and a full-length solo recital in their final semester. Vocal students must demonstrate competency equal to two years of high school instruction or a college level course in French, German, or Italian.

Students must maintain a minimum 3.0 grade point average in all advanced certificate coursework, with no less than a grade of $C$ in any course. Only three units of coursework with a grade of $C$ can count toward the performance certificate.

All units in this certificate program are applicable to the various specializations in the Bachelor of Music degree program. However, not all courses are required in each specialization. All university entrance requirements must be met to matriculate as a music major. See requirements for each specialization listed under the music major.

## Courses (MUSIC)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

## MUSIC 101. Recitals (1) $\mathrm{Cr} / \mathrm{NC}$

Preparation for individual solo performances and attendance at a minimum of 12 concerts or recitals in accordance with music requirements. Maximum credit four units.

## MUSIC 102. Music for Elementary Classroom Teachers (3)

Rudimentary music theory involving the elements of music: melody, rhythm, and harmony. Developing the understanding of these elements through instrumental and vocal experiences which include the use of unison and part-singing, the keyboard, and simple melodic and harmonic instruments. For liberal studies and preservice teachers. Not open to students with credit in Music 105 or 105B.

## MUSIC 105. Introduction to Elements of Music (3)

Music from aesthetic, communicative, theoretical, and creative perspective. Development of understanding of aesthetic valuing, musical notation, rhythm, theory, pitch, aural skills, and musical terminology. Not open to students with credit in Music 102.

## MUSIC 106A. Introduction to Aural Skills I (1)

Three hours of activity.
Prerequisite: Music 105 with a grade of C (2.0) or better, or passing placement examination.

Introduction to sight-singing and music dictation. Not open to students with credit in Music 102.

MUSIC 106B. Introduction to Aural Skills II (1)
Three hours of activity.
Prerequisite: Music 106A with a grade of C (2.0) or better, or passing placement examination.

Introduction to sight-singing and music dictation continued.
MUSIC 110A-110B. Piano - Elementary Class Instruction (1-1) Two hours.
Prerequisite: For 110A: Music 105 with a grade of $C$ (2.0) or better or passing placement examination. For 110B: Music 110A with a grade of C (2.0) or better.

Basic keyboard experience through study of music reading, notation, scales, chords, and sight-reading covering a repertoire of beginning and intermediate songs and piano literature, with emphasis on keyboard harmony. Required of music majors and minors and credential candidates for teaching at the kindergar-ten-primary level. Music 110A not open to students with credit in Music 110B, 210A, 210B, 211A, 211B. Music 110B not open to students with credit in Music 210A, 210B, 211A, 211B.
MUSIC 151. Introduction to Music (3) [GE]
Elements of music as exemplified by works representing different areas, cultures, styles, and forms. See Class Schedule for specific content.
MUSIC 160. Introduction to Electro-Acoustic Music (2)
One lecture and two hours of activity.
Historical overview of electro-acoustic music with hands-on introduction to analog multi-trade recording/mixing, digital sequencing with emphasis on shared lineage of classical and popular idioms.

## MUSIC 162. Introduction to Recording and Sound

Reinforcement (2)
One lecture and two hours of laboratory.
Physical and theoretical technologies applied to sound recording and live sound reinforcement.
MUSIC 166. Elements of Jazz I (2)
Fundamental harmonic analysis of basic jazz progressions, common modes and blues scale variations, solo transcription analysis, and ear-training.

## Performance Organization Courses

(Music 170 through 189)
The performance organization courses are devoted to the study in detail and the public performance of a wide range of representative literature for each type of ensemble and designed to provide students with practical experience in rehearsal techniques.
MUSIC 170. Chamber Music (1)
Three hours. Four hours for opera.
Prerequisite: Consent of instructor.
Sections for string, woodwind, brass, piano, vocal, and mixed ensemble groups of three or more players. Maximum credit eight units.

## MUSIC 174. Concert Band (1)

Five hours.
Prerequisite: Consent of instructor.
Study and public performance of representative literature for ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

## MUSIC 175. Marching Band (2)

More than six hours.
Prerequisite: Consent of instructor.
Study and public performance of literature for the ensemble. Practical experience in rehearsal techniques. Maximum combined credit for Music 175 and 375 eight units.

## MUSIC 176. Wind Symphony (1)

Five hours.
Prerequisite: Consent of instructor.
Study and performance of representative literature for the ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

## MUSIC 177. Symphonic Band (1)

Five hours.
Prerequisite: Consent of instructor.
Study and performance of representative literature for the ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

## MUSIC 180. Symphony Orchestra (1)

Five hours.
Prerequisite: Consent of instructor.
Maximum credit four units.
MUSIC 183. Opera Workshop (1)
Two hours of activity.
Prerequisites: By audition and consent of instructor.
Opera scenes, specific roles, chorus, design, and technical support functions in opera. Maximum credit four units.
MUSIC 184. Opera Theatre (2)
Six or more hours per week.
The interpretation and characterization of light and grand opera. Specific work in coordination of operatic ensemble. Maximum credit eight units.

## MUSIC 185. Concert Choir (1)

Five hours.
Prerequisite: Consent of instructor.
Maximum credit four units.
MUSIC 186. Chamber Singers (1)
Five hours.
Prerequisite: Consent of instructor.
Study and public performance of representative literature for the ensemble. Practical experience in rehearsal technique. Maximum credit four units.

## MUSIC 189. Jazz Ensemble (1)

More than three hours.
Prerequisite: Consent of instructor.
Study and public performance of representative literature for the ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

## MUSIC 204. Music Composition Technology (1)

Two hours of activity.
Current technology in electro-acoustic music composition, score preparation, performance practices. Open to music majors and minors only.
MUSIC 205A. Comprehensive Musicianship (3)
Prerequisite: Music 105 with a grade of C (2.0) or better, or passing placement examination.

Music theory, harmony, composition, counterpoint, and analysis. Open to music majors and minors only. Not open to students with credit in Music 205B, 305A, 305B, 405A, 405B.
MUSIC 205B. Comprehensive Musicianship (3)
Prerequisite: Music 205A with a grade of C (2.0) or better.
Music theory, harmony, composition, counterpoint, and analysis. Continuation of Music 205A. Open to music majors and minors only. Not open to students with credit in Music 305A, 305B, 405A, 405B.

## MUSIC 206A-206B. Aural Skills (1-1)

Prerequisite for Music 206A: Music 106B with a grade of C (2.0) or better. Prerequisite for Music 206B: Music 206A with a grade of C (2.0) or better.

For music majors only.
MUSIC 207. Composition Laboratory (1)
Three hours of laboratory.
Prerequisite: Consent of instructor.
Original writing in different homophonic and polyphonic forms for various media. See Class Schedule for specific content. Maximum credit two units.

MUSIC 210A-210B. Piano - Elementary Class Instruction (1-1)
Two hours.
Prerequisite: For 210A: Music 110B with a grade of $C$ (2.0) or better. For 210B: Music 210A with a grade of C (2.0) or better.

Continuation of Music 110A-110B. Not open to students with credit in Music 211A-211B.

## MUSIC 211A-211B. Class Piano - Keyboard Major (1-1)

Two hours.
Prerequisite: For 211B: Music 211A
Technical studies, keyboard harmony to include figured bass and jazz, performance practice and ornamentation, open score reading, transportation and accompanying skills, improvisation and arranging for the advanced pianist. Not open to students with credit in Music 110A, 110B, 210A, 210B.

## MUSIC 212. Voice - Elementary Class Instruction (1)

Two hours.
Mastery of the fundamentals of voice. Not open to voice majors.
MUSIC 214. Strings - Elementary Class Instruction (1)
Two hours.
Fundamentals of string instruments by lecture and acquisition of elementary skills for purpose of gaining teaching and conducting skills in working with strings. Primarily for music education majors.
MUSIC 215. Woodwinds - Elementary Class Instruction (1)
Two hours.
Fundamentals of woodwind instruments by lecture and acquisition of elementary skills for purpose of gaining teaching and conducting skills in working with woodwinds. Primarily for music education majors.
MUSIC 216. Brass - Elementary Class Instruction (1)
Two hours.
Fundamentals of brass instruments by lecture and acquisition of elementary skills. Primarily for music education majors.

## MUSIC 217. Percussion - Elementary Class Instruction (1)

Two hours.
Fundamentals of percussion through acquisition of elementary skill on the snare drum and by demonstration and lecture regarding all commonly used percussion instruments of definite and indefinite pitch. Not open to percussion majors. Primarily for music education majors.
MUSIC 218. Guitar - Elementary Class Instruction (1)
Two hours.
Open to all students interested in fundamentals of guitar and elementary music skills. Not open to guitar majors.

## MUSIC 243. Diction I (1)

Three hours of activity.
Prerequisite: Music 105.
Principles of pronunciation and enunciation. Application to song and opera using the IPA, in English and Italian.
MUSIC 246A. Practicum in Music Education I (2)
One lecture and two hours of activity.
Prerequisite: Music 205B.
Introduction to music education. Exposure to music teaching profession at all grade levels before choosing an area of specialization.

## MUSIC 246B. Practicum in Music Education II (2)

One lecture and two hours of activity.
Prerequisite: Music 246A with a grade of C (2.0) or better.
Methods and materials. Development of lesson plan and selection of appropriate materials and methods. Rehearsal techniques for elementary, junior high, and high school. Observations of public school master teachers.
MUSIC 250. Performance Major Studies (3)
Prerequisite: Open only to music majors in the performance specialization. Audition required.

Studies in technical, stylistic, and aesthetic elements of artistic performance. Maximum credit for Music 250 is 12 units.
A. Keyboard
E. Percussion
B. Voice
F. Strings
C. Woodwinds
G. Classical Guitar

## MUSIC 251. Performance Studies (1-2)

Prerequisites: Open only to music majors. Audition and approval by music faculty.

Studies in technical, stylistic, and aesthetic elements of artistic performance. Maximum credit for Music 251 is eight units.
A. Keyboard
F. Strings
B. Voice
G. Classical Guitar
C. Woodwinds
I. Jazz Instruments
D. Brass
L. Composition
E. Percussion

MUSIC 260. Electro-Acoustic Music Composition I (2)
One lecture and two hours of activity.
Prerequisite: Music 160.
Sound sampling, musique concrete, subtractive synthesis, physics of sound and basic digital audio theory. Emphasis on application of techniques and theoretical knowledge to produce original musical compositions.

## MUSIC 262. Intermediate Recording and Sound

Reinforcement (2)
One lecture and two hours of laboratory.
Prerequisite: Music 162 with a grade of C (2.0) or better.
Continuing study of physical and theoretical technologies applied to sound recording and live sound reinforcement.

## MUSIC 266. Elements of Jazz II (2)

Prerequisite: Music 166.
Harmonic analysis of standard and bebop repertoire, less common modes and dominant scales, solo transcription, analysis, and ear-training.

## MUSIC 290. Body Modalities (2)

(Same course as Dance 290)
One lecture and two hours of activity.
Alternative movement theory systems including an introduction to body modalities of yoga, Pilates, ideokinesis, Alexander and Feldenkrais techniques, Laban movement analysis and authentic movement. Maximum credit four units.
MUSIC 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## MUSIC 299. Special Study (3)

Prerequisites: Consent of School of Music and Dance director, and instructor.

Individual study.

## UPPER DIVISION COURSES

(Intended for Undergraduates)

## MUSIC 301. Recitals (1) Cr/NC

Preparation for individual solo performances and attendance at a minimum of 12 concerts or recitals in accordance with music requirements. Maximum credit four units.
MUSIC 305A. Comprehensive Musicianship (3)
Prerequisites: Music 205B with a grade of C (2.0) or better. Concurrent registration in Music 308A.

Music theory, harmony, composition, counterpoint, and analysis. Continuation of Music 205B. Open to music majors and minors only. Not open to students with credit in Music 305B, 405A, 405B.

## MUSIC 305B. Comprehensive Musicianship (3)

Prerequisites: Music 305A with a grade of C (2.0) or better. Concurrent registration in Music 308B.

Music theory, harmony, composition, counterpoint, and analysis. Continuation of Music 305A. Open to music majors and minors only. Not open to students with credit in Music 405A or 405B.
MUSIC 308A. Music History I: Medieval, Renaissance, and Baroque (3)
Prerequisite: Music 151.
European art music from ancient Greece through the Baroque. Evolution of musical style in a historical and cultural context. Interrelationships of music, politics, technology, economics, and ideology. Open to music majors and minors only.

MUSIC 308B. Music History II: Classical and Romantic (3)
Prerequisite: Music 151.
European art music from 1750 to beginning of 20th century. Evolution of musical style as a response to historical and cultural context. Interrelationships of music, politics, technology, economics, and ideology. Open to music majors and minors only.

## MUSIC 343. Music Literature for Children (3)

Prerequisite: Music 102 or 205B.
Analytical study of music suitable for children of all ages. Background information, musical structure and functions of this music in the lives of children.
MUSIC 345. World Music in Contemporary Life (3) [GE]
Folk, ancient, and modern art music of world cultures, including traditional music of Africa, Asia, Latin America, the United States and Europe, as they relate to contemporary culture. Concert attendance required. Not open to music majors except those completing Global Composition, Music Education, or Professional Studies Track 2-General.
MUSIC 346. Practicum in Music Education III (2)
One lecture and two hours of activity.
Prerequisites: Music $110 B$ and 246B with a grade of $C$ (2.0) or better.

Practical teaching applications. Students will develop and teach model lessons evaluated by students, faculty, and master teachers. Students choose a primary area of specialization and a master teacher in preparation for the final semester of the practicum series.

## MUSIC 347. Conducting (1)

Prerequisite: Music 205B with a grade of C (2.0) or better.
Basic techniques of conducting. Baton technique, conducting patterns, score reading, elements of performance and interpretation. Practical experience in typical conducting situations.
MUSIC 349. Instrumental Conducting (1)
Prerequisite: Music 347 with a grade of C (2.0) or better.
Elements of baton technique and development of skills common to instrumental conducting. Representative literature and techniques for instrumental organizations studied and performed. Practical experience in typical conducting situations.
MUSIC 351. Music and Culture (3) [GE]
Significant music literature of various historical and cultural periods with emphasis on stylistic characteristics through directed listening. Not open to music majors. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units from Music 351, 351C, and 351D of which three units may be applicable to General Education.
MUSIC 360. Electro-Acoustic Music Composition II (2)
One lecture and three hours of laboratory.
Prerequisite: Music 260.
Concepts, terminology, and history combined with composition and recording projects introducing analog electro-acoustic music with multi-track recording and analog synthesizers; or digital electro-acoustic music using digital synthesizers and computer software. May be repeated with new content. Maximum credit four units.

## MUSIC 364A-364B. History of Jazz (2-2).

Jazz style and forms as they have evolved historically. Classroom playing experience in jazz styles as a part of study. Designed for music majors and minors.
MUSIC 366. Elements of Jazz III (2)
Prerequisite: Music 266.
Post bop repertoire, altered modes and scales, solo transcription, analysis, and ear-training.

## Performance Organization Courses

## (Music 370 through 389)

The performance group courses are devoted to the study in detail and the public performance of a wide range of representative literature for each type of ensemble, and designed to provide students with practical experience in rehearsal techniques.
MUSIC 370. Chamber Music (1)
Three hours. Four hours for opera.
Prerequisite: Consent of instructor.
Sections for string, woodwind, brass, piano, vocal, and mixed ensemble groups of three or more players. May be repeated with new content. See Class Schedule for specific content. Maximum credit four units.

## MUSIC 374. Concert Band (1)

Five hours.
Prerequisite: Consent of instructor.
Study and public performance of representative literature for ensemble. Practical experience in rehearsal techniques. Maximum credit four units.
MUSIC 375. Marching Band (2)
More than six hours.
Prerequisite: Consent of instructor.
Study and public performance of representative literature for the ensemble. Practical experience in rehearsal technique. Maximum combined credit for Music 175 and 375 eight units.
MUSIC 376. Wind Symphony (1)
Five hours per week.
Prerequisite: Consent of instructor.
Study and public performance of representative literature for ensemble. Practical experience in rehearsal techniques. Maximum credit four units.
MUSIC 377. Symphonic Band (1)
Five hours.
Prerequisite: Consent of instructor.
Study and performance of representative literature for the ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

## MUSIC 380. Symphony Orchestra (1)

Five hours.
Prerequisite: Consent of instructor.
Maximum credit four units.
MUSIC 383. Opera Workshop (1)
Two hours of activity.
Prerequisites: By audition and consent of instructor.
Opera scenes, specific roles, chorus, design, and technical support functions in opera. Maximum credit four units.
MUSIC 384. Opera Theatre (2)
Six or more hours per week.
Interpretation and characterization of light and grand opera. Specific work in coordination of opera ensemble. Maximum credit eight units.

## MUSIC 385. Concert Choir (1)

Five hours.
Prerequisite: Consent of instructor.
Maximum credit four units.
MUSIC 386. Chamber Singers (1)
Five hours.
Prerequisite: Consent of instructor.
Study and public performance of representative literature for the ensemble. Practical experience in rehearsal technique. Maximum credit four units.
MUSIC 389. Jazz Ensemble (1)
More than three hours.
Prerequisite: Consent of instructor.
Study and public performance of representative literature for ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

MUSIC 390. Somatic Movement Practices II (1)
(Same course as Dance 390)
Two hours of activity.
Prerequisites: Music 290 [or Dance 290] and Dance 190 with a grade of $C$ (2.0) or better in each course.

Continuing body-mind practices focused on first-person experience of movement. Increasing awareness of sensations and perceptions cultivated through additional practices of somatic systems to include Bartenieff Fundamentals, Body-Mind Centering, and Feldenkrais Method. Maximum credit three units.

## MUSIC 405A. Comprehensive Musicianship: Orchestration,

 Arranging (3)Prerequisite: Music 305B with a grade of C (2.0) or better.
Orchestration and arranging techniques for comprehensive musicianship composition and arranging projects. Open to music majors and minors only.
MUSIC 405B. Comprehensive Musicianship: Counterpoint (3)
Prerequisite: Music 305B with a grade of C (2.0) or better.
Counterpoint in the sixteenth and eighteenth century. Open to music majors and minors only.
MUSIC 408A. Music History III: 20th and 21st Centuries (3)
Prerequisites: Music 151 and 308B.
Art music from beginning of 20th century to present. Evolution of musical style in a historical and cultural context. Interrelationships of music, politics, technology, economics, and ideology. Open to music majors and minors only.
MUSIC 408B. Music History IV: Jazz History and
Improvisation (2)
One lecture and two hours of laboratory.
Prerequisites: Music 151 and 305B.
Historical and theoretical overview of jazz art music tradition. Rhythmic, harmonic, and melodic components. Analytical score study. Practical experience in modal and tonal jazz improvisation. Open only to music majors and minors.
MUSIC 446. Practicum in Music Education IV (2)
One lecture and three hours of laboratory.
Prerequisites: Music 205B, 210A, 346, 347 with a grade of C (2.0) or better.

Early field experience. Students will complete a minimum of 45 hours of public school teaching in their area of specialization. Master teachers will provide on-site guidance and evaluation. Field experience and increased effectiveness discussed.
MUSIC 450. Performance Major Studies (3)
Prerequisite: Open only to music majors in the performance specialization. Audition required.

Studies in technical, stylistic, and aesthetic elements of artistic performance. Maximum credit for Music 450 is 12 units.
A. Keyboard
E. Percussion
B. Voice
F. Strings
C. Woodwinds
G. Classical Guitar
D. Brass

MUSIC 451. Performance Studies (1-2)
Prerequisites: Open only to music majors. Audition and approval by music faculty.
Studies in technical, stylistic, and aesthetic elements of artistic performance. Maximum credit for Music 451 is eight units.
A. Keyboard
F. Strings
B. Voice
G. Classical Guitar
C. Woodwinds
I. Jazz Instruments
D. Brass
L. Composition
E. Percussion

MUSIC 460. Art of Recording (3)
Two lectures and three hours of activity.
Prerequisite: Music 360.
Creation of audio recordings of artistic merit. Vocal/instrumental microphone techniques for classical, jazz, rock; recording audio design, construction; acoustical properties, theories, mathematics.

## MUSIC 466. Elements of Jazz IV (2)

Prerequisite: Music 366.
Atonal and aeromedical theories and philosophy, research paper, solo transcription, analysis, and ear-training.

## MUSIC 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## MUSIC 499. Special Study (1-3)

Prerequisite: Consent of School of Music and Dance director. Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
MUSIC 507. Composition Laboratory (1)
Three hours of laboratory.
Prerequisites: Music 207 with a grade of $C$ (2.0) or better and consent of instructor.

Continuation of Music 207. Maximum credit two units.
MUSIC 515. Professional Orientation for Music Performers (2)
One lecture and two hours of activity.
Prerequisites: Twelve units of upper division or graduate standing in B.M. or M.M. degree. Others by consent of instructor.

Conditions met in professional music world as well as opportunities available. Auditions, contracts, legal and tax responsibilities, media and press promotion, grants, professional management, apprenticeships.

## MUSIC 516. Performance Practice Forum (1)

Two hours of activity.
Prerequisite: Consent of instructor.
Musical style, repertoire, presentation, and evaluation as embodied in a musical performance. May be repeated with new content. Maximum credit four units.
MUSIC 518. Community Performance Practicum (2)
One lecture and two hours of activity.
Practicum for performers, educators, administrators, researchers, or clinicians intending to develop and implement performing arts outreach programs in the community.

## MUSIC 530. Music Internship (1-3) $\mathrm{Cr} / \mathrm{NC}$

Two hours of activity per unit.
Prerequisite: Upper division or graduate standing in a music degree program.

Work with approved music professionals and agencies off-campus to include education, performance, production, and administration under the combined supervision of agency personnel and instructor. Maximum credit six units.

## MUSIC 541. Performance Studies Pedagogy (3)

Two lectures and three hours of laboratory.
Prerequisite: Consent of instructor.
Teaching strategies for beginning and intermediate applied music. Survey and evaluation of teaching materials. Observation of individual or group lessons. See Class Schedule for specific content. Maximum credit three units.

## MUSIC 542. Performance Studies Laboratory (2)

One lecture and three hours of laboratory.
Prerequisite: Music 541 with grade of $C$ (2.0) or better.
Practical experience in teaching of individual or group lessons. See Class Schedule for specific content. Maximum credit two units.

## MUSIC 543. Diction II (1)

Prerequisite: Music 243.
Principles of pronunciation and enunciation. Application to song and opera in Spanish, German, and French.

## MUSIC 554. Music Literature (2)

Prerequisite: Music 205B with a grade of C (2.0) or better.
Study of music literature. Analysis of scores and recordings. May be repeated with new course content. See Class Schedule for specific content. Maximum credit six units applicable to a bachelor's and master's degree.

MUSIC 560. Music and Visual Media (3)
Two lectures and three hours of activity.
Prerequisite: Music 460.
Techniques and aesthetics of combining music/sounds and visual elements, including contemporary film scoring techniques, sound design for installations and performance art, video game scoring and experimental immersive 3-D virtual reality.
MUSIC 561. Area Studies: Ethnomusicology (3)
Prerequisite: Music 305B with a grade of C (2.0) or better.
Music of a specific culture. May be repeated with new content.
See Class Schedule for specific content. Maximum credit six units.
MUSIC 566A-566B. Jazz Arranging and Composition (2-2)
Prerequisite: Music 305B with a grade of C (2.0) or better.
Analysis of jazz compositions and arrangements; arranging and composing for large and small jazz ensembles.

## MUSIC 570. Advanced Chamber Music (1)

Three hours.
Prerequisite: Consent of instructor.
Study and public performance of established repertory as well as new compositions. Sections for string, woodwind, brass, piano, vocal, and mixed ensemble groups of three or more players. May be repeated with new course content. See Class Schedule for specific content. Maximum credit four units.

## MUSIC 576. Wind Symphony (1)

Five hours.
Prerequisite: Consent of instructor.
Study and public performance of representative literature for the ensemble. Practical experience in rehearsal techniques. Maximum credit four units.
MUSIC 577. Symphonic Band (1)
Five hours.
Prerequisite: Consent of instructor.
Study and performance of representative literature for the ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

## MUSIC 580. Symphony Orchestra (1)

Five hours.
Prerequisite: Consent of instructor.
Study and public performance of representative literature for the ensemble. Practical experience in rehearsal techniques. Maximum credit four units.
MUSIC 583. Opera Workshop (1)
Two hours of activity.
Prerequisites: By audition and consent of instructor.
Opera scenes, specific roles, chorus, design, and technical support functions in opera. Maximum credit four units.
MUSIC 584. Opera Theatre (2)
Six or more hours per week.
Prerequisite: By audition.
Interpretation and characterization of light and grand opera. Specific work in coordination of opera ensemble. Maximum credit eight units of which six units are applicable to a master's degree.
MUSIC 585. Concert Choir (1)
Five hours.
Prerequisite: Consent of instructor.
Study and public performance of representative literature for the ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

## MUSIC 586. Chamber Singers (1)

Five hours.
Prerequisite: Consent of instructor.
Study and public performance of representative literature for the ensemble. Practical experience in rehearsal technique. Maximum credit four units.

## MUSIC 589. Jazz Ensemble (1)

Three hours.
Prerequisite: Consent of instructor.
Study and public performance of representative literature for the ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

## MUSIC 590. Advanced Practicum in Music (3)

Prerequisite: Consent of instructor in area of practicum.
Students will be assigned to appropriate class sections within selected undergraduate area as instructional assistants under staff supervision.

## MUSIC 596. Special Topics in Music (1-3)

A specialized study of selected topics from the several areas of music. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.
MUSIC 598. Music Review: History, Analysis, and
Aural Skills (3) Cr/NC
Prerequisite: Admission to the graduate program.
Review basic concepts of music theory, aural skills, and music history required for full candidacy in the graduate music program. Not applicable to the master's degree in music.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

## Natural Science

IN THE COlLEGE OF SCIENCES<br>Administered by the Department of Physics

OFFICE: Physics 131
TELEPHONE: 619-594-6240
WEBSITE: http://physics.sdsu.edu
Faculty
Emeritus: Dowler, Feher, Fisher, Goldberg, May, Roeder, P., Wallace
Professor: Kimbrough (Geological Sciences)

## Offered by Natural Science

Teaching major in physical science in preparation for the single subject teaching credential in science/physical science.

## The Major

The physical science major is offered as an interdisciplinary approach to the study of science. It stresses the interrelationship of physics with chemistry, geology, astronomy, biology, and mathematics. The major is designed primarily for students who intend to become single subject teachers of both interdisciplinary science and physics.

One of the requirements for acceptance into the College of Education's post-baccalaureate credential program is to pass the appropriate California Subject Examinations for Teachers (CSET). Completion of the physical science major provides excellent academic training for students who plan to teach integrated science at the middle or high school level and physics at the high school level. It provides the breadth and depth required to pass the general science and physics CSET.

In addition to completing the major and passing the CSET, all candidates for a Single Subject Teaching credential at San Diego State University must complete the requirements outlined in the catalog under Teacher Education or Dual Language and English Learner Education. Contact the School of Teacher Education or the Dual Language and English Learner Education department for up-to-date information on prerequisites.

## Impacted Program

The physical science major is an impacted program. To be admitted to the physical science major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Physical Science Major

In preparation for the Single Subject Teaching Credential in Science/Physical Science
With the B.A. Degree in Applied Arts and Sciences
(Major Code: 19011) (SIMS Code: 777303)
All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of the catalog on "Graduation Requirements." Candidates may complete one of their two American Institutions courses at the upper division level or satisfy the California state and local government portion of American Institutions by passing the California Government examination available through the Testing Services office.

A minor is not required for this major.
Preparation for the Major. Africana Studies 140 or Chicana and Chicano Studies 111A or Communication 103; Astronomy 109, 201; Biology 203, 203L, 204, 204L; Chemistry 200, 201; Mathematics 150, 151, 252; Physics 195, 195L, 196, 196L, 197, 197L; Teacher Education 211B (1 unit). (50 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 32 upper division units to include Geological Sciences 412; Mathematics 342A; Physics 311, 317, 350, 354, 357, 360, 400A, 499 (History of Science and Technology).

## Courses (N SCI)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSE

N SCI 100. Physical Science (3) [GE]
Conceptual approach to major issues in physics and chemistry, including principles of motion and energy and structure and properties of matter. Effects of physical science and technology on individuals and human society.

## UPPER DIVISION COURSE

## (Also Acceptable for Advanced Degrees)

N SCI 596. Special Topics in Natural Science (1-4)
Prerequisites: Minimum 10 units of natural science.
Selected topics in natural science for preservice and inservice elementary and secondary teachers and candidates for the M.A. in education. May be repeated with consent of instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.

OFFICE: Communication 130
TELEPHONE: 619-594-3985 / 619-594-1134 / 619-594-1135
FAX: 619-594-7848 / 619-260-6821

## Faculty

Chair: Kaiser
Professor: Kaiser
Associate Professor: Langham
Assistant Professors: Arnold, C., Arnold, Z., Delavega, Fritts, Lee, Vingua

## Offered by the Department

Minor in naval science.

## NROTC Curriculum

The naval science program provides college students desiring to become Naval or Marine Corps reserve officers a basic professional background in the areas of leadership, ethics, and management; piloting and celestial navigation; nautical rules of the road; ship characteristics, design and propulsion; theory and employment of weapon systems; and development of warfare and amphibious operations. This curriculum is open to all university students. A graduate will be able to assume, through development of mind and character, the highest responsibilities of command, citizenship, and government.

The primary objectives of the Naval Science department curriculum are to provide:

1. An understanding of the fundamental concepts and principles of naval science;
2. A basic understanding of associated professional knowledge;
3. An appreciation of the requirements for national security;
4. A strong sense of personal integrity, honor and individual responsibility; and,
5. An educational background which will allow naval science students to undertake successfully, in later periods in their careers, advanced and continuing education in a field of application and interest to the Navy or Marine Corps.

## Naval Science Minor

(Minor Code: 31119) (SIMS Code: 665701)
The minor in naval science consists of a minimum of 15 units in naval science, 12 of which must be upper division.

Courses in the minor may not be counted toward the major, but may be used to satisfy requirements for preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Courses (NAV S)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

NAV S 101. Introduction to Naval Science (3)
Two lectures and two hours of activity.
Structure, principles, and practices; lines of command and control; logistical organizations; functions and services of major components of the Navy and Marine Corps; shipboard organization; ethics and basic leadership skills.

## NAV S 102. Naval Engineering (3)

Ship characteristics and types including hull, electrical, auxiliary systems, stability and damage control. Operation advantages and disadvantages of steam, gas turbine, and diesel propulsion engines receive in-depth study. Leadership topics in an engineering setting.

NAV S 201A. Naval Leadership and Management I (3)
Prerequisites: Naval Science 101 and 102.
Ethics and integrity, progressing through management theory and practical functions of management, culminating with module on leadership. Exposure to complex ethical, managerial, and leadership issues.

## NAV S 202. Sea Power and Maritime Affairs (3)

Sea power and maritime affairs; general concept of sea power including Merchant Marine; role of naval warfare components used to support the Navy's mission; sea power as an instrument of national policy; comparative study of US and Soviet strategies.

## UPPER DIVISION COURSES

(Intended for Undergraduates)

## NAV 5 301. Navigation (3)

Piloting, navigation, maneuvering, rules of nautical road. Use of charts, visual and electronic aids, operation of magnetic and gyro compasses, relative motion vector analysis, formation tactics, and ship employment. Tides, currents, wind, weather, navigation instruments, and characteristics of electronic navigation.

## NAV S 302. Naval Operations (3)

Prerequisite: Naval Science 301.
Naval operations and operations analysis, ship handling, and afloat communications. Case analyses stress practical application of skills. Leadership traits in themes of communication counseling and conflict resolution applicable to naval operations.

## NAV S 310. Evolution of Strategic Operations (3)

Forms of warfare through history to formulate sense of historical continuity in evolution of warfare, to develop a basic sense of strategy and alternative military actions, and to explore impact of historical precedent on military thought and actions.

## NAV S 401A. Naval Weapons (3)

Prerequisite: Naval Science 302.
Develop working foundation and understanding of diversity and complexity of Navy and Marine Corps weapons systems including target detection and tracking, radar, sonar, electronic warfare systems, weapons warheads, fuzing, propulsion, guidance, launching, and fire control systems.

## NAV S 402. Naval Leadership and Ethics (3)

Prerequisite: Naval Science 201A.
Naval leadership and management with emphasis on military justice administration, naval personnel management, material management, and administration of discipline.

## NAV S 412. Fundamentals of Maneuver Warfare (3)

Current military developments, modern tactical principles, and warfare. Historical influences on operational, strategic, and tactical levels of maneuver warfare practices in current and future operating environments. (Formerly numbered Naval Science 410.)

OFFICE: Adams Humanities 3138
TELEPHONE: 619-594-5357 / FAX: 619-594-2765
WEBSITE: http://nursing.sdsu.edu
Agency Member of the American College of Nurse Midwives and the American Association of Colleges of Nursing. Accredited by the American College of Nurse Midwives Accreditation Commission for Midwifery Education. Approved by the California State Board of Nursing and the Commission on Collegiate Nursing Education.

## Faculty

Emeritus: Blenner, Broom, Fitzsimmons, Flagg, Freitas, Hadley, Hatton, Heineken, Hines, Hunter, Laiho, LaMonica, Lantz, Leslie, Lookinland, Moffett, Morris, Reed, Riegel, Robinson, Saarmann, Shively, Stichler, Sweeney, Todero, Verderber, Wahl, Walker, Wozniak
Director: Greiner
Professors: Fields, Greiner, Singh-Carlson
Associate Professors: Gates, Lee
Assistant Professors: Carlson, Choflet, Cullum, Dye, Graham, Kim, Nibbelink, Shamsalizadeh (SDSU-IV)
Lecturers: Anderson, Balsam, Bencke, Bertken, Bidwell, Bonnar, Cazares-Machado, Concilio, Deming, Diaz, Finkel, Fitzpatrick, Gonzalez, Heiss, Herold, Hughen, Jacobson, Katzman, Kik, Madigan, Maves, McEwan, Moreno, Osthimer, Panlilio, Parr, Preston, Reavis, Rivera, Scott, M., Taylor, Zirkle

## Offered by the School

Master of Science degree in nursing.
Concentration in advanced practice nursing of adults and the elderly.
Concentration in nursing education.
Concentration in nursing leadership in health care systems.
Major in nursing with the B.S. degree in applied arts and sciences. Registered Nurse B.S., Major in Nursing Program.
School nurse services credential (refer to the Graduate Bulletin).

## The Major

The nursing profession is concerned with the total health care of individuals, families, and communities. It is a profession that believes in the prevention of illness, caring for those who are acutely ill, and helping people with long-term rehabilitative problems to live in the healthiest way possible. Nursing is both a science and an art. It has its foundation in biophysical and behavioral sciences, as well as in nursing science and evidence-based practice.

Students in the nursing program are provided opportunities to acquire knowledge from the natural and social sciences; to develop clinical decision-making abilities; to utilize current research in the application of the nursing process; to develop leadership potential and accountability in professional practice; to become aware of the emerging roles of the professional nurse and of the social forces affecting health and health care systems; and to learn to balance professional and personal growth and values.

Nurses are in demand throughout the country and are needed in such settings as acute care hospitals, community health agencies, homes, jails, outreach programs, public schools, health maintenance organizations, and clinics which serve underprivileged, minority, and rural populations. Career opportunities are particularly good for minority, bilingual / bicultural persons.

## Retention Policy

Progress in the nursing program is dependent upon completion of preparation for the major and nursing courses each semester. Students will not be permitted to progress to the next semester until preparation for the major and nursing courses are completed from the previous semester. Students who meet any one of the following criteria will be dropped from the program: (1) earn a grade of $C$ - (1.7) or below in two nursing courses; (2) earn less than the
required grade for two prerequisite courses; (3) earn a grade of $C$ (1.7) or below in one nursing course twice or below the minimum required grade in one prerequisite course twice. Continuation in good standing in the nursing program is contingent on students following the defined plan of study. Student failure to follow the plan of study may result in either removal from the program or an extended time frame for program completion. See the School of Nursing student handbook for updated information.

## Impacted Programs

The nursing majors are impacted programs. To be admitted to the nursing major, students must meet the following criteria:
a. First-time freshmen admitted via direct-entry must have completed one year of high school college preparatory courses in intermediate algebra, biology, and chemistry with laboratory. A grade of $B(3.0)$ or better is required in each preparatory course including high school Advanced Placement (AP) and International Baccalaureate (IB) courses;
b. Transfer students must have completed the same requirements as entering freshmen or equivalent college-level courses;
c. Biology 211, 211L, 212, $261^{(1)}$, Chemistry $102^{(2)}$, Statistics 250 (or Biology 215 or Psychology 280) ${ }^{3}$, Communication 103 (or a course listed under General Education, I.1. Oral Communication) ${ }^{4}$, Rhetoric and Writing Studies 100 (or a course listed under General Education, I.2. Written Communication) ${ }^{(5}$, and Rhetoric and Writing Studies 200 (or a course listed under General Education, I.3. Critical Thinking) ${ }^{(6)}$ with the required grades of $\mathrm{B}-(2.7)$ or better for all biology courses, C or above for all others. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). The grades for Biology 211 and 211L must average B-. Students may not proceed to Biology 212 if they receive a C- in either Biology 211 or 211 L regardless of the average of the two;
d. Have a cumulative GPA of 3.2 or better in the nursing major and the registered nurse program;
To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the nursing major at SDSU (assuming continuous enrollment).
${ }^{(1)}$ Upper division transfer students fulfill these course requirements by completing human anatomy (with required laboratory), human physiology (with required laboratory), and microbiology (with required laboratory), designated as certified CSU GE Life Sciences and Laboratory (B2, B3) transfer courses.
${ }^{(2)}$ Upper division transfer students fulfill this course requirement with a CSU GE certified B1 chemistry course (general, organic, inorganic, or integrated).
${ }^{(3)}$ Upper division transfer students fulfill this area with a statistics course certified for CSU GE mathematics/quantitative reasoning (B4).
${ }^{(4)}$ Upper division transfer students fulfill this area with any certified CSU GE oral communication (A1) transfer course.
(5) Upper division transfer students fulfill this area with any certified CSU GE written communication (A2) transfer course.
(6) Upper division transfer students fulfill this area with any certified CSU GE critical thinking (A3) transfer course.

## Standards for Admission

## Admission to the University

Applicants must be eligible for admission to the university. See "Admission and Registration" section of this catalog. Students accepted as nursing majors are subject to further screening to determine their eligibility to be admitted into the professional coursework.

## Admission to the Professional Program in Nursing

The School of Nursing is an impacted program with more qualified applicants applying than can be accepted into the major. Admission to the School of Nursing is competitive. First-time
freshmen students applying for direct entry via Cal State Apply will be ranked for admission based on the CSU Eligibility Index. Transfer students will be admitted according to rank and the number of positions available.

1. Minimum admission requirements for transfer students are:
a. The Test of Essential Academic Skills (T.E.A.S.): 80\% or above overall.
b. Cumulative GPA of 3.2 or better.
c. Successful completion of Biology 211, 211L, 212, $261^{(1)}$, Chemistry $102^{(2)}$, Statistics 250 (or Biology 215 or Psychology 280) ${ }^{3}$, Communication 103 (or a course listed under General Education, I.1. Oral Communication) ${ }^{(4)}$, Rhetoric and Writing Studies 100 (or a course listed under General Education, I.2. Written Communication) ${ }^{5}$, and Rhetoric and Writing Studies 200 (or a course listed under General Education, I.3. Critical Thinking) ${ }^{6}$ or their equivalents with the required grades of $B$ - (2.7) or better for all biology courses, C or above for all others.
d. Students dismissed or disqualified from other nursing programs are not eligible for admission.
2. Prerequisite courses are required for nursing majors before students may begin taking clinical nursing courses.
a. Course grade requirement ( $B$ - or better) in each of these required courses: Biology 211, 211L, 212, and $261^{(1)}$ (NOTE: The grades for Biology 211 and 211L must average B- (2.7). Students may not proceed if they receive a C-in either Biology 211 or 211 L regardless of the average of the two. Registration in Biology 261 may be concurrent with the start of School of Nursing courses for direct entry students only).
${ }^{(1)}$ Upper division transfer students fulfill these course requirements by
completing human anatomy (with required laboratory), human physiology
(with required laboratory), and microbiology (with required laboratory),
designated as certified CSU GE Life Sciences and Laboratory (B2, B3)
transfer courses.
(2) Upper division transfer students fulfill this course requirement with a
CSU GE certified B1 chemistry course (general, organic, inorganic, or
integrated).
(3) Upper division transfer students fulfill this area with a statistics course
certified for CSU GE mathematics/quantitative reasoning (B4).
(4) Upper division transfer students fulfill this area with any certified CSU GE
oral communication (A1) transfer course.
(5) Upper division transfer students fulfill this area with any certified CSU GE
written communication (A2) transfer course.
(6) Upper division transfer students fulfill this area with any certified CSU GE
critical thinking (A3) transfer course.
3. Mathematics and Writing Competency Requirements. Prior to beginning clinical nursing courses, all students must satisfy the SDSU mathematics and writing competency requirements.
4. Health Requirement. To meet the specific health requirements, a medical examination and immunizations must be completed. The medical examination is in addition to the one required for admission to the university. For specific information concerning medical examination and immunization series, consult the School of Nursing website.
5. Registered Nurse - Bachelor of Science, Major in Nursing Program. A registered nurse-Bachelor of Science in nursing program is available for registered nurses who completed a regionally accredited program with either an Associate Degree in Nursing or a Diploma in Nursing.
6. Formal Application. All applicants must submit an application to the university via Cal State Apply according to deadlines for impacted programs.
Special Instructions
7. Impacted Program. The nursing major is designated as an impacted program and specific regulations related to admissions are imposed.
8. Full-Time/Part-Time Study. Students are encouraged to enroll in all of the nursing courses scheduled each semester. However, part-time enrollment can be arranged by contacting the undergraduate adviser within the school and with approval of the Director.
9. Transportation. Students enrolled in the nursing program are required to provide their own transportation to off-campus clinical agencies and for home visits.
10. Health Insurance. All admitted School of Nursing students are advised to obtain health insurance coverage. Students are responsible for health care cost when services are rendered by a health care agency.
11. CPR Certification. Upon admission to the School of Nursing, students must have CPR certification through the American Heart Association - BLS for Health Care Provider. Certification must be maintained throughout the program.
12. Malpractice Insurance. Malpractice insurance is provided by the CSU at this time. Check website for any changes.
13. Upon completion of the first year of courses and prior to beginning any clinical nursing courses, students are required to have a physical examination and bring proof of the examination and required immunizations as instructed by the School of Nursing.
14. Background Check and Drug Screen. Upon admission to the nursing program, and possibly yearly thereafter, students must successfully pass a background check and drug screen in order to be placed in a clinical rotation. Red flag issues which prevent placement may impede progression and successful completion of degree requirements.
15. A valid social security number may be required for placement in most clinical agencies and to take the RN NCLEX examination.
16. Option Open to L.V.N.'s for eligibility to the R.N. license examination. THIS OPTION HAS NO RELATION TO DEGREE REQUIREMENTS AND DEGREE COMPLETION.
Course Requirements for Licensed Vocational Nurse (L.V.N.) 30-Unit Option
Course Units
(1) BIOL 211, 211 L

Fundamentals of Microbiology ................ 4
(1) BIOL 261 NURS 304

NURS 312
\# @ NURS 316
NURS 400

NURS 400L

NURS 458

NURS 458L
NURS 499
Human Physiology..................................... 4
Clinical Pharmacology in
Nursing Practice. .. 2
Concepts in Professional Nursing ........... 3
Psychiatric-Mental Health Nursing........ 5
Nursing Care of the Acute and Chronically III Adult and Gerontologic Patient II. 3.5

Nursing Care of the Acute and Chronically III Adult and Gerontologic Patient II Laboratory. 2.5

Nursing Management and Leadership... .... 3
Nursing Management and Leadership Laboratory.............................. 2 Special Study (elective in the clinical or health focus of student's choice). .... 1
Total. .$\overline{30}$
${ }^{(1)}$ Upper division transfer students fulfill these course requirements by completing human anatomy (with required laboratory), human physiology (with required laboratory), and microbiology (with required laboratory), designated as certified CSU GE Life Sciences and Laboratory (B2, B3) transfer courses.
\#Includes geriatric nursing.
${ }^{\text {@ Includes management/evaluation of patient care. }}$

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Nursing Major

With the B.S. Degree in Applied Arts and Sciences
(Major Code: 12031)
(SIMS Code 554601 - Nursing Premajor)
(SIMS Code 554603 - Internal SDSU, Transfers)
(SIMS Code 554605 - Continuing Direct Admit Track 1)
(SIMS Code 554606 - Continuing Direct Admit Track 2)
All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A minor is not required with this major.
Nursing majors may be part-time students in the curriculum with Director approval. Consultation with the undergraduate adviser is mandatory.

Preparation for the Major. Students in the nursing program are coded as nursing majors once they successfully complete Biology 211, 211L, 212, $261^{(1)}$, Chemistry $102^{(2)}$, Statistics 250 (or Biology 215 or Psychology 280) ${ }^{3}$, Communication 103 (or a course listed under General Education I.1. Oral Communication) ${ }^{4}$, Rhetoric and Writing Studies 100 (or a course listed under General Education, I.2. Written Communication) ${ }^{(5)}$, and Rhetoric and Writing Studies 200 (or a course listed under General Education, I.3. Critical Thinking) ${ }^{6}$, with the required grades (B- or above for all biology courses, C or above for all others). Nursing 202, 206, 208, 219, and 221. (43 units)
${ }^{(1)}$ Upper division transfer students fulfill these course requirements by completing human anatomy (with required laboratory), human physiology (with required laboratory), and microbiology (with required laboratory), designated as certified CSU GE Life Sciences and Laboratory (B2, B3) transfer courses.
${ }^{(2)}$ Upper division transfer students fulfill this course requirement with a CSU GE certified B1 chemistry course (general, organic, inorganic, or integrated).
${ }^{(3)}$ Upper division transfer students fulfill this area with a statistics course certified for CSU GE mathematics/quantitative reasoning (B4).
${ }^{(4)}$ Upper division transfer students fulfill this area with any certified CSU GE oral communication (A1) transfer course.
(5) Upper division transfer students fulfill this area with any certified CSU GE written communication (A2) transfer course.
(6) Upper division transfer students fulfill this area with any certified CSU GE critical thinking (A3) transfer course.
NOTE: Students must complete Psychology 101 and 230 to satisfy nursing program requirements. A grade of $C$ (2.0) or better is required in all nursing courses. No nursing course may be repeated more than once. A grade of $C(2.0)$ or better is required in statistics. A grade of $B-(2.7)$ or better is required in all biology courses.

General Education. Students with this major are required to take Philosophy 330 to satisfy three units of upper division Humanities, IV.C. It is recommended that students take Sociology 101 to satisfy three units of Foundations of Learning, II.B., Social and Behavioral Sciences.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of $C(2.0)$ or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. Nursing majors are required to participate in a pre-approved international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course will be substituted). Specific details can be found on the college website at http://www. chhs.sdsu.edu/international. (Second baccalaureate degree students are exempt from this requirement.)

To meet the international experience requirement, majors must complete one of the following:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;

OR
5. One course selected from:

- Health and Human Services 290 or 350;
- Asian Studies 490;
- Education 450;
- General Studies 450;
- International Security and Conflict Resolution 450;
- Latin American Studies 320, 450, or 550;
- Political Science 450;
- Public Health 550;
- Science 350.

Major. A minimum of 41 upper division units in nursing to include Nursing 300, 304, 307, 316, 321, 354, 356, 400, 400L, 415, 415L, 421.

## Registered Nurse - Major in Nursing

## Program

With the B.S. Degree in Applied Arts and Sciences
(Major Code: 12032) (SIMS Code: 554604)
A Registered Nurse - Bachelor of Science nursing program is available for registered nurses who completed a regionally accredited program with either an Associate Degree in nursing or a Diploma in nursing.

Standards for Admission. See Standards of Admission for Professional Program in Nursing.

Additional Requirements. The following documents are also required for admission to the RN-BS Program:

1. Copy of current California RN license is required for progression through the program.
2. Official transcript showing Associate Degree in nursing or Diploma from a regionally accredited institution.
3. Official transcripts from all colleges/universities attended to date.
4. CPR certification - American Heart Association - BLS for Health Care Provider.
International Experience. Nursing majors are required to participate in a pre-approved international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course will be substituted). Specific details can be found on the college website at http://www. chhs.sdsu.edu/international. (Second baccalaureate degree students are exempt from this requirement.)

To meet the international experience requirement, majors must complete one of the following:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;

OR
5. One course selected from:

- Health and Human Services 290 or 350;
- Asian Studies 490;
- Education 450;
- General Studies 450;
- International Security and Conflict Resolution 450;
- Latin American Studies 320, 450, or 550;
- Political Science 450;
- Public Health 550;
- Science 350.

Curriculum Plan. A total of 120 units are required for the degree. Up to 70 transfer credits from ADN or diploma programs may be granted. Upon passing NCLEX, 15 units will be credited to the student's transcript.

## Program

The following upper division nursing courses are required of all RN-BS candidates (Prerequisites for upper division nursing courses are not applicable to the RN-BS program.):

## Course

NURS 307
Nursing Research........................................ 3
NURS 312
Concepts of Professional Nursing.......... 3
NURS 320
Health Assessment and Health
Promotion for RN to BS .................
NURS 400

AND
NURS 400L

OR
NURS 437
NURS 415
NURS 415L
NURS 458
NURS 458L

Courses (NURS)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

NURS 202. Client Assessment (3)
One-and-one-half hours of lecture and 4.5 hours of laboratory.
Prerequisites: Admission to nursing program and concurrent registration in Nursing 206.

Determining and measuring variables relevant to assessment of psychosocial and physical functioning.
NURS 206. Fundamentals of Nursing Practice (5)
Three lectures and six hours of laboratory.
Prerequisites: Admission to nursing program and concurrent registration in Nursing 202.

Basic nursing skills and integration of diagnosis, planning, and implementation of nursing care. Application of nursing process.

## NURS 208. Pathophysiology (3)

Prerequisites: Biology 212 and credit or concurrent registration in Biology 261.

Pathophysiologic processes as they apply to nursing care of patients.

## NURS 219. Information Management for Professional

Relationships (2)
Prerequisite: Admission to the School of Nursing.
Information management in patient care, research, evi-dence-based practice, outcomes and practice management. Patient/family-provider communication, privacy, security, and ethical decision making on patient care, research, and quality management.

## NURS 221. Professional Formation $A$ (1)

History of health care and changing roles of nurses in relation to other health professions. Social, cultural, regulatory agencies, and policy affecting patient care.

## NURS 253. Stress and Human Health (3) [GE]

Impacts and potential sources of stress. Methods to manage, prevent, and relieve stress. Relationships between stress and disease.

## NURS 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

## NURS 300. Nursing Care of the Acute and Chronically III Adult

 and Gerontologic Patient I (8)Three lectures and 15 hours clinical per week.
Prerequisites: Nursing 206, 208, and credit or concurrent registration in Nursing 304.

Psychological, social, and physiologic stressors affecting acute and chronic illness and health of adults. Appropriate nursing care and interventions. Not open to students with credit in Nursing 252.
NURS 304. Clinical Pharmacology in Nursing Practice (2)
Prerequisites: Biology 212, Chemistry 102, and credit or concurrent registration in Biology 261.

Major classifications of drugs; pharmacological and toxicological activity; clinical applications. Role of nurse in assessment, intervention, and patient education.

## NURS 307. Research and Evidence-Based Practice (3)

Prerequisites: Mathematics/Quantitative Reasoning General Education, and credit or concurrent registration in Nursing 300.

Nursing research process. Emphasis on identification of researchable questions and beginning critiquing ability.
NURS 312. Concepts in Professional Nursing (3)
Prerequisite: Admission to the RN to BS program.
Concepts in professional nursing. Differentiation of professional practice with emphasis on stress theory, therapeutic communication, values clarification, and legal aspects. Not open to generic students.

## NURS 316. Psychiatric-Mental Health Nursing (5)

Three lectures and six hours of laboratory.
Prerequisite: Admission to the School of Nursing.
Theory and clinical laboratory in application of nursing process to care of clients evidencing maladaptive responses to psychosocial stressors. Presentation of theories describing and explaining maladaptive behaviors and application of nursing interventions in a variety of treatment modalities. (Formerly numbered Nursing 416.)

## NURS 320. Health Assessment and Health Promotion

for RN to BS (4)
Two lectures and six hours of laboratory.
Prerequisite: Admission to the RN to BS program.
Expands the registered nurse's ability to measure and interpret physical, physiologic, and psychosocial functioning. Clinical presentation of disease and disability. Evidence-based practice guidelines for health promotion and disease management. Not open to students with credit in Nursing 501 and 501L.

## NURS 321. Professional Formation B (1)

Prerequisite: Nursing 221.
Virtue ethics, California Nurse Practice Act, and American Nurses Association Code of Ethics. Societal expectations, obligations, professional requirements, legal decisions, and clinical realities.
NURS 350. Women's Health Across the Lifespan (3) [GE]
Explores health issues women face across their lives. Focus on developing knowledgeable users of research on causes of and risk factors for health problems. Not applicable to nursing majors.

## NURS 351. Exploring Healthcare in America (3) [GE]

Evolution of federal and state programs and private insurance. Roles of consumer decision-making, corporate influence, and lobbying on health service use. Ethical and social imperatives.

## NURS 354. Nursing Care of the Childbearing Family (5)

Two-and-one-half hours of lecture and 7.5 hours of laboratory.
Prerequisites: Nursing 206, 208, and 304.
Family-centered focus encompassing adaptive and maladaptive responses to stressors in the maternity cycle and their effect on the neonate. Clinical laboratory focuses on the application of nursing theory and process in providing preventive, supportive, and restorative care to mothers and neonates.

## NURS 356. Pediatric Nursing (5)

Two-and-one-half hours of lecture and 7.5 hours of laboratory. Prerequisites: Nursing 206, 208, and 304.
Stressors affecting the child on health-illness continuum. Nursing theory and laboratory focuses on application of nursing process in providing preventive, supportive and restorative therapeutic modalities in a variety of settings. Emphasis on the child in the family and the necessary intervention to promote adaptation of the child to attain, maintain or regain an optimum level of health.

## NURS 397. Preparation for Clinical Practice (1) Cr/NC

Two hours per week of supervised practice.
Prerequisite: Admission to the School of Nursing.
Supervised practice of nursing skills and techniques. Course is elective for students. Credit earned in this course not applicable to bachelor's degree.
NURS 400. Nursing Care of the Acute and Chronically III Adult and Gerontologic Patient II (3.5)
Prerequisites: Nursing 300 and concurrent registration in Nursing 400L.

Theory in care of adults of all ages who have acute and chronic health concerns leading to complex and high acuity health problems. Not open to students with credit in Nursing 452 or 454.
NURS 400L. Nursing Care of the Acute and Chronically III Adult and Gerontologic Patient II Laboratory (2.5)
Nine hours of clinical practice.
Prerequisites: Nursing 300 and concurrent registration in Nursing 400.

Clinical care of adults of all ages who have acute and chronic health concerns leading to complex and high acuity health problems. Not open to students with credit in Nursing 452 or 454.

## NURS 410. Gerontological Nursing (3)

Two lectures and three hours of laboratory.
Prerequisites: Nursing 300, 304.
Theory and selected laboratory experience focusing on stressors affecting elderly on health-illness continuum. Gerontologic nursing in a variety of settings.
NURS 415. Community Health Nursing (3)
Prerequisites: Nursing 300, 304, and concurrent registration in Nursing 415L.

Assessment and utilization of community health care concepts and delivery with emphasis on promotion of health, prevention of illness and individual and group teaching techniques. Consideration given to cultural aspects of health care.
NURS 415L. Community Health Nursing Laboratory (2)
Six hours of laboratory.
Prerequisites: Nursing 300, 304, and concurrent registration in Nursing 415.

Laboratory experience in care of clients in the community and nursing of community as client.

## NURS 421. Professional Formation C (1)

Prerequisite: Nursing 321.
Current and emerging roles in nursing leadership. Practice environments, expectations of society in these environments, role of health policy and advocacy in leadership, methods to remain current in professional practice.

## NURS 437. Care Management of People with Complex

 Health Needs (6)Three-and-one-half hours of lecture and five hours of laboratory.
Prerequisites: Nursing 307, 312, 320 with a grade of $C$ (2.0) or better in each course. Admission to the RN to BS program.

Theory and clinical practice in the care management of people of all ages who have complex health concerns that require coordination of care across disciplines and transitions between care settings.

## NURS 458. Nursing Management and Leadership (3)

Prerequisites: Nursing 316, 415, 415L; concurrent registration in Nursing 458L.

Theories and functions of nursing management and leadership within health care system. Economics of health care.

NURS 458L. Nursing Management and Leadership
Laboratory (2)
Six hours of laboratory.
Prerequisite: Concurrent registration in Nursing 458.
Laboratory experience in nursing management and leadership.

## NURS 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.
NURS 498. Cooperative Education Supervised
Practice (2-6) Cr/NC
Seminar: Two hours biweekly. Clinical hours arranged by student and employer.

Prerequisite: Nursing 300.
Supervised practice in application of previously learned knowledge and skills in selected clinical agencies. Professional interaction with other health care workers to strengthen professional nursing identity. Work under supervision of registered nurse preceptor and faculty coordinator. May be repeated. Maximum credit six units.

## NURS 499. Special Study (1-3)

Prerequisites: Nursing 300 and consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
NURS 501. Advanced Health Assessment and Health Promotion (3)
Prerequisites: Consent of School of Nursing graduate adviser; concurrent registration in Nursing 501L.

Physical and psychosocial assessment techniques, health promotion strategies for select populations.
NURS 501L. Advanced Health Assessment and Health

## Promotion Laboratory (1)

Three hours of laboratory.
Prerequisites: Consent of School of Nursing graduate adviser; concurrent registration in Nursing 501.

Laboratory experience in advanced health assessment and health promotion.

## NURS 596. Special Topics in Nursing (1-3)

Prerequisites: Completion of 30 upper division units in nursing or graduate status; 3.0 grade point average.

Selected topics in the practice of nursing. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

# Nutrition 

In the College of Health and Human Services

OFFICE: Exercise and Nutritional Sciences 351
TELEPHONE: 619-594-5541
WEBSITE: http://ens.sdsu.edu
Didactic Program in Dietetics is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND).

## Faculty

Emeritus: Beshgetoor, Cooke, Dickerson, Josephson, Spindler
Director: Mahar
Professors: Hong, Kern
Associate Professor: Hooshmand
Assistant Professors: Bhutani, Liu, McClain
Lecturers: Copp, Lane, Petrisko
Offered by the School of Exercise and Nutritional Sciences
Master of Science degree in nutritional sciences.
Master of Science degree in nutritional science and Master of
Science degree in exercise physiology (concurrent program).
Major in foods and nutrition with the B.S. degree in applied arts and sciences.

## The Major

The major in foods and nutrition offers a comprehensive multidisciplinary study of the nature and quality of the food supply and the nutritional requirements for health in people. Students take core sequences of coursework in the areas of food management, food science, and nutrition founded on prerequisite courses in anatomy, behavioral and social sciences, biochemistry, biology, chemistry, management, and physiology. Course emphasis in the major is placed upon the composition, properties, quality, and safety of foods and food ingredients; the relationships of metabolism and utilization of nutrients in food by the human body to health and disease states; influences of exercise and fitness; the physiological basis for diet therapy; nutrition problems in the community; and organization, management and operation of food service facilities.

This major is planned for students interested in qualifying professionally for diverse careers in the fields of dietetics, food service management, and food industries. Successful completion of the didactic program in dietetics allows students eligibility to apply for post-baccalaureate accredited dietetic internship/ supervised practice programs and/or take the registration examination for dietetic technicians. Students must be admitted to and complete a dietetic internship/supervised practice program and pass the Commission on Dietetic Registration (CDR) credentialing examination in order to become a registered dietitian nutritionist (RDN).

Professional careers in dietetics include administrative, public service, research, teaching, and therapeutic positions in clinics, hospitals, long-term care, schools, and other public and private organizations and institutions. Graduates may also qualify as food science technical specialists within food companies, governmental agencies, and laboratories; as food service managers; and as specialists in advertising, sales, or marketing of foods and nutritional products and services.

## Retention Policy

The College of Health and Human Services expects that all foods and nutrition majors will make reasonable academic progress towards the degree. Foods and nutrition premajors who have completed major preparatory courses, earned 60 units, but have less than a 2.9 GPA may be removed from the premajor and placed in undeclared.

## Impacted Program

The foods and nutrition major is an impacted program. To be admitted to the foods and nutrition major, students must meet the following criteria:
a. Complete the following courses (or their equivalents): Nutrition 201, 203, 205; Biology 100, 100L, 211, 211L, 212; Chemistry 100, 130, 160; Economics 201 (or Statistics 250); Exercise and Nutritional Sciences 200; Psychology 101; Sociology 101. A grade of $C$ (2.0) or better must be earned in Chemistry 100 and 130. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Have a cumulative GPA of 2.90 or better.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Foods and Nutrition Major

## With the B.S. Degree in Applied Arts and Sciences

## (Major Code: 13061) (SIMS Code: 552931)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A minor is not required with this major.
Preparation for the Major. Nutrition 201, 203, 205; Biology 100, 100L, 211, 211L, 212; Chemistry 100, 130, 160; Economics 201 (or Statistics 250); Exercise and Nutritional Sciences 200; Psychology 101; Sociology 101. (43 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$. A grade of $C$ (2.0) or better must be earned in Chemistry 100 and 130.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. Foods and nutrition majors are required to participate in a pre-approved international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course will be substituted). Specific details can be found on the college website at http://www.chhs.sdsu.edu/international.

To meet the international experience requirement, majors must complete one of the following:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;

OR
5. One course selected from:

- Health and Human Services 290 or 350;
- Asian Studies 490;
- Education 450;
- General Studies 450;
- International Security and Conflict Resolution 450;
- Latin American Studies 320, 450, or 550;
- Political Science 450;
- Public Health 550;
- Science 350.

Major. A minimum of 40 upper division units to include Nutrition 302, 302L, 303, 304, 401, 404, 405, 406, 408; Biology 336; Exercise and Nutritional Sciences 304, 434; and seven units selected with the approval of the adviser from Nutrition 312, 407^, 409^, 499, 510^; Biology 315; Business Administration 350*, Communication 307*, 371; Counseling and School Psychology 320, 400; Management $352^{*}$; Nursing 350; Psychology 319*; Public Health 302*, 303*, 305*, 362. Biology 336 will also satisfy three units of the General Education requirement in Explorations of Human Experience IV.A. Natural Sciences.
$\wedge$ Admission to the Didactic Program in Dietetics (DPD) required.
*Additional prerequisites required.

## Courses (NUTR)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

## NUTR 201. Fundamentals of Nutrition (3)

Prerequisites: Biology 100; Chemistry 100 or 200. Proof of completion of prerequisites required: Copy of transcript.

Role of nutrition in health promotion and disease prevention. Current concepts, controversies, and dietary recommendations from a scientific perspective.

## NUTR 203. Cultural Aspects of Food and Nutrition (2)

Prerequisite: Completion of a General Education course in 1) Oral Communication, 2) Written Communication, or 3) Critical Thinking. Food habits and health beliefs about foods and nutrition. Regional and ethnic influences.
NUTR 205. Introduction to Science of Food (4)
Two lectures and six hours of laboratory.
Prerequisites: Grade of C (2.0) or better in Chemistry 100. Credit or concurrent registration in Chemistry 130.
Composition, preparation, preservation, sensory and consumer evaluation of foods.
NUTR 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)

## NUTR 302. Advanced Nutrition (3)

Prerequisites: Nutrition 201, Biology 336, and one course in biochemistry. Concurrent registration in Nutrition 302L. Proof of completion of prerequisites required: Copy of transcript.

Integration of cellular, physiological, and biochemical relationships with human nutrient requirements.
NUTR 302L. Advanced Nutrition Laboratory (2)
Six hours of laboratory.
Prerequisites: Nutrition 201, Biology 336, and one course in biochemistry. Concurrent registration in Nutrition 302. Proof of completion of prerequisites required: Copy of transcript.

Application and evaluation of techniques used to assess nutritional status, including basic methods, experimental animal and human studies.

## NUTR 303. Quantity Food Production (2)

Prerequisite: Nutrition 205 or Business Administration 360.
Quantity food production service delivery systems. Skills for food safety, recipe standardization, menu planning, purchasing, production operations, and quality standards. Intended for majors in foods and nutrition and hospitality and tourism management.
NUTR 304. Nutrition Throughout the Life Span (3)
Prerequisite: Nutrition 201.
Factors affecting nutrient needs and ways to meet nutrient requirements across the life span. Not open to students with credit in Nutrition 208.
NUTR 312. Nutrition for Athletes (3)
Prerequisite: Nutrition 201.
Influence of exercise on nutritional status and dietary requirements. Current theories and practices related to nutrition and athletic performance.

## NUTR 313. Contemporary Nutrition (3) [GE]

Food and nutrient classifications, functions, requirements, and recommendations. Relationship of nutrition to health, fitness, performance, and disease. Menus and recipes, food packaging labels, nutrition literature.

## NUTR 398. Supervised Field Experience (1-3)

Three hours per week for 15 weeks per unit of course credit.
Prerequisites: Upper division standing; limited to foods and nutrition majors.

Supervised practical experience in areas of food and nutrition. Maximum credit six units.
NUTR 401. Advanced Science of Food (3)
Prerequisites: Nutrition 205 and Biology 211, 211L. Proof of completion of prerequisites required: Copy of transcript.

Physical, chemical, nutritional, and functional properties and quality attributes of foods and food additives; food handling, changes and interactions of food components induced by processing and storage; food laws, regulations, legislation, and food safety issues. (Formerly numbered Nutrition 301.)
NUTR 404. Food Systems Management (3)
Prerequisite: Credit or concurrent registration in Nutrition 303.
Managerial functions in food service systems.
NUTR 405. Experimental Food Science and Technology Laboratory (2)
Six hours of laboratory.
Prerequisite: Credit or concurrent registration in Nutrition 401.
Application of principles and methods of physical and sensory evaluation and food component analysis to conventional and fabricated foods; effects of additives and ingredient variations; project studies; data interpretation and report writing.
NUTR 406. Medical Nutrition Therapy I (3)
Prerequisites: Nutrition 302 and 302L. Proof of completion of prerequisites required: Copy of transcript.

Nutrition assessment, diagnosis, pathophysiology, and medical nutrition therapy for chronic diseases.
NUTR 407. Medical Nutrition Therapy I Laboratory (1)
Two hours of laboratory.
Prerequisites: Admission to SDSU Didactic Program in Dietetics, Nutrition 302, 302L, and concurrent registration in Nutrition 406.

Required for Didactic Program in Dietetics competencies established by the Academy of Nutrition and Dietetics. Builds multi-level skills for dietetic practice to assess nutritional status and to develop care plans for patients.

## NUTR 408. Medical Nutrition Therapy II (3)

Prerequisite: Nutrition 406.
Concepts and principles of disease pathophysiology, nutrition assessment and medical nutrition therapy for specific diseases and conditions.

NUTR 409. Medical Nutrition Therapy II Laboratory (1)
Two hours of laboratory.
Prerequisites: Admission to SDSU Didactic Program in Dietetics, Nutrition 406 and credit or concurrent registration in Nutrition 408.

Advanced practical experience in food service and medical nutrition therapy for future dietitians.

## NUTR 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## NUTR 499. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

NUTR 510. Nutrition Education and Community Health (3)
Two lectures and three hours of activity.
Prerequisites: Nutrition 203 and 304 with a grade of $C$ (2.0) or better in each course.

Nutrition counseling and education. Nutritional problems in the community with consideration of their resolution. Field placement experience required.

## NUTR 596. Advanced Studies in Nutrition (1-6)

Prerequisites: Nine upper division units in nutrition.
Advanced study of selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Maximum credit of nine units of 596. No more than six units of 596 may be applied to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

## Oceanography

Administered by the Department of Geological Sciences

OFFICE: Geology/Mathematics/Computer Science 237
TELEPHONE: 619-594-5586 / FAX: 619-594-4372
E-MAIL: geology@sdsu.edu
WEBSITE: http://www.geology.sdsu.edu
San Diego State University provides preparation for ocean-oriented careers by offering marine-related coursework and oceanographic experience within regular degree programs in the Departments of Biology, Chemistry and Biochemistry, Economics, Civil, Construction, and Environmental Engineering, Geography, Geological Sciences, Mechanical Engineering, and Physics. Master's degrees with specialization in marine problems may also be earned in these departments. The Ph.D. degree is offered in biology, chemistry, and ecology, jointly with the University of California. Degrees in general oceanography or marine studies are not offered by the university. The Coastal and Marine Institute coordinates work in the area of marine studies and provides special supporting services to the faculty, staff and students, including student advising, assistance in research and publication, operation of the university's marine laboratory at San Diego Bay, and a boat operations program.

Courses in general oceanography are offered by faculty from the Departments of Biology and Geological Sciences. Advanced coursework and research in geological and physical oceanography are conducted in the Geological Sciences Department. Advanced courses and research in biological oceanography, marine biology, marine botany, and marine zoology are conducted in the Department of Biology. Similar marine-related coursework and research are offered in the Departments of Economics and Geography and in the College of Engineering. Students who require advising in these areas should inquire at one of the departments listed above or the Coastal and Marine Institute. (See section of this catalog on Colleges, College of Sciences Research Centers and Institutes.)

## Oceanography Minor

## (Minor Code: 19191) (SIMS Code: 775379)

Offered for undergraduate science students by the Department of Geological Sciences, the minor in oceanography consists of a minimum of 15-16 upper division units to include Oceanography 320 ; Biology 515 or 517 ; and nine additional units selected with the approval of the adviser. Additional prerequisite courses are required.

The oceanography minor is intended for students with extensive background in the sciences.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Courses (OCEAN)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSE

OCEAN 100. The Ocean Planet (4) [GE]
Three lectures and three hours of laboratory.
Physical, chemical, geological, and biological foundations of the global ocean system, with emphasis on science as a process and its role in environmental issues from global climate change to local pollution.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
OCEAN 320. Oceans of Change (3) [GE]
Prerequisites: One introductory college course in a life science and one in a physical science.

Scientific, socioeconomic, and geopolitical perspectives on human impacts upon the global ocean system to include ocean warming and acidification, regional fisheries depletion, and local coastal issues.
OCEAN 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

For additional courses in Marine Studies see:
Biology 515. Marine Invertebrate Biology
Biology $517 . \quad$ Marine Ecology
Geography 592. Intermediate Remote Sensing of Environment
Geography 592L. Intermediate Remote Sensing of Environment Laboratory

# Persian 

In the Department of Linguistics and Asian/Middle Eastern Languages
In the College of Arts and letters

OFFICE: Storm Hall West 214
TELEPHONE: 619-594-5268 / FAX: 619-594-4877
WEBSITE: http://persianlanguage.sdsu.edu

## Faculty

Chair: Samraj
Lecturer: Paydar

## Offered by the Department of Linguistics and Asian/Middle

 Eastern LanguagesCourses in Persian.
Major or minor work in Persian is not offered.

## Language Requirement for the B.A. Degree in Liberal Arts and Sciences

Students electing the study of Persian to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Persian 201 or the equivalent level of achievement. The usual sequence of coursework is Persian 101, 102, and 201. Refer to section of catalog on "Graduation Requirements" for additional ways to satisfy competency.

## High School Equivalents

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:

1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

## Courses (PERS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

Native speakers of Persian will not receive credit for taking lower division courses in Persian except with advance approval from the department.

No credit will be given for Persian 101, 102, 201, and 202 taken out of sequence.
PERS 101. Elementary Modern Persian I (4) [GE]
Introduction to modern Persian and Persian writing system. Development of speaking, listening, and reading skills using multimedia materials. Vocabulary for everyday topics and develop culturally appropriate discourse strategies for everyday situations. Not open to students with credit in Persian 102, 201, 202, 301, or a higher-numbered Persian course.

## PERS 102. Elementary Modern Persian II (4) [GE]

Prerequisite: Persian 101 or two years of high school Persian.
Continuation of Persian 101. Development of speaking, listening, and reading skills using multimedia materials. Vocabulary for everyday topics and develop culturally appropriate discourse strategies for everyday situations. Not open to students with credit in Persian 201, 202, 301, or a higher-numbered Persian course.

## PERS 201. Intermediate Persian I (4) [GE]

Prerequisite: Persian 102.
Further development of speaking, reading, listening, and writing skills, with emphasis on language of everyday conversation. Integrated approach to learning Persian to include awareness and appreciation of Persian culture. Not open to students with credit in Persian 202, 301, or a higher-numbered Persian course.

## PERS 202. Intermediate Persian II (4) [GE]

Prerequisite: Persian 201.
Intermediate level students achieve further proficiency in speaking, listening, reading, and writing; produce language needed for daily routines and work related discourse. Not open to students with credit in Persian 301 or a higher-numbered Persian course.

## PERS 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
All upper division courses in Persian are taught in Persian unless otherwise stated.

No credit will be given for Persian 301 and 302 taken out of sequence.
PERS 301. Advanced Persian I (4) [GE]
Prerequisite: Persian 202.
Oral expression and writing for practical purposes; exposure to various dialects through newspaper and media; elements of literary and classical language.

## PERS 302. Advanced Persian II (4) [GE]

Prerequisite: Persian 301.
Writing complex literary and expository texts. Reading modern and classical texts to include complicated media. Producing, understanding debates and speeches.
PERS 400A. Iranian Life and Culture through Literature (3)
Prerequisite: Persian 302.
Iranian life and culture as represented through literature. Iran's cultural, political, and social trends. History and the study of cross-cultural encounters.

## PERS 400B. Iranian Life and Culture through

Contemporary Film (3)
Prerequisite: Persian 302.
Current cultural and social issues in Iran through study of representative films.

## PERS 496. Topics in Persian Studies (1-4)

Topics in Persian language, literature, culture, and linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit eight units. May be taught in English.

## Philosophy

In the College of Arts and Letters

OFFICE: Arts and Letters 446
TELEPHONE: 619-594-5263
WEBSITE: http://philosophy.sdsu.edu
Faculty
Emeritus: Chaffin, Feenberg, Freeman, Moellendorf, Nelson, Rosenstein, Shields, Troxell, Warren, Weber, Weissman, Weston Chair: Barbone
Professors: Atterton, Corlett, Francescotti, Wawrytko, Wheeler
Associate Professor: Barbone
Assistant Professors: Draz, Murdock, Stramondo
Lecturers: Neuner, Reyes
Offered by the Department
Master of Arts degree in philosophy.
Major in philosophy with the B.A. degree
in liberal arts and sciences.
Minor in philosophy.

## The Major

The philosophy major explores and seeks to understand values and the nature of reality. Through the study of philosophy, questions are asked about existence and experience: What is truth? What is morally right? What kind of life is best? What kind of society? Is there an ultimate reality? Philosophy studies the types of questions that most other subject areas are unable to address fully.

There are three different ways these questions are characteristically investigated in the philosophy major at San Diego State University. They are approached historically, by studying the history of philosophy from the ancient Greeks to the present; analytically, by carefully examining the meanings and interrelationships of ideas; and critically, by training students in the art of evaluating various claims and the arguments for and against them.

While the analytical and critical approach are part of every course in philosophy, the philosophy curriculum at San Diego State University emphasizes the historical approach. The aim is to provide the philosophy major with a thorough grounding in the development of philosophy so that the student is well prepared to participate in the discussion of contemporary issues.

The education of a philosophy major, along with providing the satisfaction of dealing with fundamental issues which have concerned serious thinkers for many centuries, also provides the student with skills that may be used in a variety of careers. Some students begin graduate work after their B.A., either in philosophy, with the expectation of teaching or writing in the field, or in law, education, or other professional programs. Some enter new fields of research, working on computer problems or artificial intelligence. Other students find that the special skills they have developed as philosophy majors - the ability to read complex material with comprehension, to analyze problems, to find relevant sources, to evaluate evidence, to propose solutions and to examine them self-critically, and to report the results of their inquiries with clarity and coherence - are valued by employers in many different fields. Such students may find career opportunities in government, industry, finance, and social services.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Impacted Program

The philosophy major is an impacted program. To be admitted to the philosophy major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Philosophy Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 15091) (SIMS Code: 115301)
All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in philosophy courses can apply to the degree.

A minor is not required with this major.
Preparation for the Major. Six lower division units in philosophy to include Philosophy 120.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 27 upper division units in philosophy to include Philosophy 401A and 401B. No more than six units of 300level philosophy courses will count toward the major.

## Philosophy Minor <br> (SIMS Code: 115301)

The minor in philosophy consists of a minimum of 18 units in philosophy to include at least three lower division units and 15 upper division units. No more than six units of 300-level philosophy courses will count toward the minor.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Courses (PHIL)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

PHIL 101. Introduction to Philosophy: Ethics (3) [GE]
Philosophical inquiry, with emphasis on problems of moral value. Students are encouraged to think independently and formulate their own tentative conclusions concerning a variety of vital contemporary issues facing individuals and society.
PHIL 102. Introduction to Philosophy: Knowledge and Reality (3) [GE]
Introduction to philosophical inquiry with emphasis on problems of knowledge and reality. Students are encouraged to think independently and formulate their own tentative conclusions.
PHIL 120. Introduction to Logic (3) [GE]
Introduction to deductive and inductive logic. Logic and language. Analysis of fallacies. Uses of logic in science and in daily life.

## PHIL 140. Technology and Human Behavior (3) [GE]

Consequences of technology on our lives as integrated physiological, psychological, and social beings. Environmental problems associated with rapid development of technology. Responses to problems by various philosophers and writers.
PHIL 200. Critical Thinking and Composition (3) [GE]
Prerequisites: Satisfaction of the SDSU Written Communication Assessment requirement and Africana Studies 120 or American Indian Studies 120 or Chicana or Chicano Studies 111B or Linguistics 100B or Rhetoric and Writing Studies 100 [or English 100] or 105B. Proof of completion of prerequisites required: Test scores or verification of exemption; grade report or copy of transcript.

Introduction to critical thinking and writing. Evaluation and development of correct reasoning and effective style and organization in argumentative writing. Correct deductive and inductive reasoning. Fallacies. Critical appraisal of evidence. Construction of rebuttals and counter-arguments. (Formerly numbered Philosophy 110.)

## PHIL 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## PHIL 299. Special Study (3)

Prerequisite: Consent of department chair and instructor. Individual study.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
PHIL 310. Philosophy and Human Nature (3) [GE]
Concept of human nature. Descriptive and normative aspects of major theories of human nature.

## PHIL 312. Women and Philosophy (3) [GE]

Exploration of women's contributions to philosophy, both present and historically. Concepts relating to women and femininity, both by the philosophical canon and by more recent feminist philosophers.

## PHIL 315. Philosophy and Literature (3) [GE]

Study of literature of philosophical significance and of philosophical problems of literature. (Formerly numbered Philosophy 334.)

## PHIL 325. A Major Philosophical Topic (3)

General introduction to a major philosophical topic (e.g. cosmopolitan justice, freedom of the will, the nature and existence of God, theory and evidence). Maximum credit six units.
PHIL 328. Philosophy, Racism, and Justice (3) [GE]
Prerequisite: Upper division standing.
Philosophical concepts and theories of racism and racial justice. Arguments for and against such theories.
PHIL 329. Social Ethics (3) [GE]
Ethical issues of contemporary life. Individualism vs. collectivism; democracy vs. dictatorship; ethical problems arising in law, medicine, business, government and interpersonal relationships.

## PHIL 330. Biomedical Ethics (3) [GE]

Value judgments upon which medicine is based and the ethical issues which medicine faces.
PHIL 332. Environmental Ethics (3) [GE]
(Same course as Sustainability 332)
Development of traditional values concerning the natural environment. Reasons for altering values in light of modern changes in relationship of human beings to the environment. Application of ethical principles to actions affecting the environment.
PHIL 335. Philosophy of Business Ethics (3) [GE]
Prerequisite: Upper division standing.
Moral status of business practices; arguments and theories regarding ways to run businesses and corporations; issues that arise in everyday practices of businesses. May not be taken in place of Management 444, required of Fowler College of Business majors.
PHIL 340. Morality of War and Peace (3) [GE]
Historical and contemporary arguments regarding morality of war, pacifism, and terrorism, with contemporary applications.

## PHIL 341. Logic and the Law (3) [GE]

Logic in legal contexts. Inductive reasoning methods applied to legal briefs, case studies, and LSATs. Construction, presentation, and evaluation of written and oral arguments, using historical and contemporary legal decisions.

## PHIL 342. Morality and the Law (3) [GE]

Understanding and application of the law via contemporary moral controversies in case law and legal practice.

## PHIL 343. Ethics Bowl (3)

Interdisciplinary, case-study approach to contemporary ethical issues. Creative, critical thinking skills and theoretical ethical frameworks; present and defend positions in team debate. Required participation in mock competitions. Selected students participate in Intercollegiate Ethics Bowl California Regional Competition (possibly also National Intercollegiate Ethics Bowl). Maximum credit six units.
PHIL 344. Global Justice (3) [GE]
Current debates in political philosophy concerning the justification, content, and scope of duties of global justice to include distributive justice, nationalism vs. cosmopolitanism, morality of immigration controls, justification of human rights, and limits of sovereignty.

## PHIL 351. Chinese Philosophy (3) [GE]

(Same course as Asian Studies 351)
Philosophical traditions which have shaped the intellectual life and culture of China. Emphasis on foundational texts surviving from pre-Han China.

## PHIL 353. Buddhist Philosophy (3) [GE]

Intellectual traditions within Buddhism, both ancient and contemporary, including key areas of metaphysics, epistemology, and axiology.

## PHIL 360. Contemporary Brazilian Philosophers (3)

Contemporary Brazilian philosophers and their relevance to Brazilian culture and politics.

## PHIL 401A. History of Philosophy: Pre-Socratic through

Medieval (3)
From Pre-Socratic through Medieval. Not open to students with credit in Philosophy 411 and 412.
PHIL 401B. History of Philosophy: Renaissance and Early Modern (3)
Renaissance and early modern philosophy. Not open to students with credit in Philosophy 412 and 413.
PHIL 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## PHIL 499. Special Study (1-3)

Prerequisites: Six upper division units in philosophy and prior arrangements with a supervising instructor.

Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
PHIL 505. Nineteenth-Century European Philosophy (3)
Prerequisite: Upper division or graduate standing.
Major European philosophers of the nineteenth century. May include Hegel, Kierkegaard, Marx, Mill, Nietzsche, and Schopenhauer. (Formerly numbered Philosophy 414.)
PHIL 506. Twentieth-Century Continental Philosophy (3)
Prerequisite: Upper division or graduate standing.
Major figures and movements in European philosophy from Husserl to the present.

## PHIL 508. Existentialism (3)

Prerequisite: Upper division or graduate standing.
The philosophical aspects of existentialism. Major emphasis is on the diversity of thought within a common approach as this is shown in individual thinkers.

## PHIL 509. Theory of Ethics (3)

Prerequisite: Upper division or graduate standing.
Advanced topics in ethical theory, including normative ethics and meta-ethics. May include historical or contemporary readings or both. Issues may include content of moral value, nature of moral judgment, and accounts of virtue and right action. (Formerly numbered Philosophy 528.)

## PHIL 510. Philosophy of Law (3)

Prerequisite: Upper division or graduate standing.
Philosophical and ethical investigation into the nature of law, rights, liberty, responsibility, and punishment.

## PHIL 512. Political Philosophy (3)

Prerequisite: Upper division or graduate standing.
Selected aspects of the political structures within which we live, such as law, power, sovereignty, justice, liberty, welfare.

## PHIL 514. Philosophy of Art (3)

Prerequisite: Upper division or graduate standing.
The nature of aesthetic experience. Principal Western theories of art in relation to actual artistic production and to the function of art in society. (Formerly numbered Philosophy 542.)

## PHIL 515. Philosophy of Film (3)

Prerequisite: Upper division or graduate standing.
Investigation into metaphysical, aesthetic, and epistemological dimensions of film. Narration, authorship, cognitive and emotional engagement, social and philosophical ramifications.

## PHIL 516. Non-Western Aesthetics (3)

Prerequisite: Upper division or graduate standing.
How non-Western cultures developed aesthetic theories complementing, challenging, or expanding more familiar Amero-eurocentric theories. Historical and contemporary works representing a spectrum of non-Western philosophies.

## PHIL 521. Deductive Logic (3)

Prerequisite: Philosophy 120.
Principles of inference for symbolic deductive systems; connectives, quantifiers, relations and sets. Interpretations of deductive systems in mathematics, science and ordinary language. Not open to students with credit in Mathematics 523.

## PHIL 523. Theory of Knowledge (3)

Prerequisite: Upper division or graduate standing.
Philosophical analysis of knowledge, including conceptions of belief, justification, and truth.

## PHIL 530. Metaphysics (3)

Prerequisite: Upper division or graduate standing.
Prominent theories of reality, e.g., realism and nominalism, materialism and idealism, teleology and determinism. (Formerly numbered Philosophy 525.)

## PHIL 534. Philosophy of Language (3)

Prerequisite: Upper division or graduate standing.
An introduction to theories of meaning for natural languages and formal systems; concepts of truth, synonymy and analyticity; related epistemological and ontological problems. (Formerly numbered Philosophy 531.)

## PHIL 535. Philosophy of Religion (3)

Prerequisite: Upper division or graduate standing.
Philosophical analysis of the nature and existence of God.

## PHIL 536. Philosophy of Mind (3)

Prerequisite: Upper division or graduate standing.
Prominent theories and arguments regarding relation between mind and body. Varieties of dualism considered along with major materialist rivals.

## PHIL 537. Philosophy of Science (3)

Prerequisite: Upper division or graduate standing.
The basic concepts and methods underlying contemporary scientific thought. Contributions of the special sciences to a view of the universe as a whole.

## PHIL 538. Neuroethics (3)

Prerequisite: Upper division or graduate standing.
Morally salient features of brain science and development and application of neurotechnology.

PHIL 555. Empirical Perspectives of Buddhism (3)
Prerequisite: Upper division or graduate standing. Recommended: Philosophy 353.

Historical and contemporary Buddhist scholarship and practice.

## PHIL 565. Asian Philosophies (3)

Prerequisite: Upper division or graduate standing.
Dimensions of Asian philosophies, past and present. Encounter between Buddhism and post-modern science, contemporary Asian philosophers ("global gurus") and their impact on non-Asian cultures, enigmatic notion of emptiness (sunya, wu). See Class Schedule for specific topic. May be repeated with new content. Maximum credit six units.

## PHIL 575. A Major Philosopher (3)

Prerequisite: Upper division or graduate standing.
The writings of one major philosopher. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units applicable to the major. Maximum credit six units applicable to a master's degree.
PHIL 576. A Major Philosophical Tradition (3)
Prerequisite: Upper division or graduate standing.
Focused study of a major philosophical tradition (e.g., Platonism, Confucianism, positivism). May be repeated with new content. See Class Schedule for specific content. Maximum credit six units applicable to the major. Maximum credit six units applicable to a master's degree.

## PHIL 577. A Major Philosophical Problem (3)

Prerequisite: Upper division or graduate standing.
Focused study of a major philosophical problem (e.g., the problem of evil, the problem of other minds, the existence of God). May be repeated with new content. See Class Schedule for specific content. Maximum credit six units applicable to the major. Maximum credit six units applicable to a master's degree.

## PHIL 578. Philosophical Methods (3)

Prerequisite: Upper division or graduate standing.
Focused study of major philosophical methods (e.g., uncertain inferences and non-bivalent logics, phenomenological method, deconstruction). May be repeated with new content. See Class Schedule for specific content. Maximum credit six units applicable to the major. Maximum credit six units applicable to a master's degree.

## PHIL 596. Selected Topics (3)

Prerequisite: Upper division or graduate standing.
A critical analysis of a major problem or movement in philosophy. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of nine units of 596 applicable to the major in philosophy. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## PHIL 599. Special Study (1-3)

Prerequisite: Upper division or graduate standing.
Directed individual study in philosophy on a theme or topic chosen in consultation with the instructor. Maximum credit six units. Maximum combined credit six units of Philosophy 599 and 798 applicable to the M.A. degree in Philosophy.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

OFFICE: Physics 131
TELEPHONE: 619-594-6240 / FAX: 619-594-5485
E-MAIL: physicsinfo@sdsu.edu
WEBSITE: http://www.physics.sdsu.edu
Faculty
Emeritus: Burnett, Cottrell, Day, Feher, Goldberg, Lilly, Oseroff, Papin, Piserchio, Roeder, S., Shackelford, Shore, Sweedler, Wallace, Wolter
Chair: Sinha
Professors: Davis, Johnson, Sinha, Torikachvili, Weber
Associate Professors: Anderson, Baljon, Tambasco
Assistant Professors: Kuznetsova, Navarro Perez, Nollett, Sundqvist
Lecturers: Chalmers, Leduc, Mardirossian

## Offered by the Department

Master of Arts degree in physics.
Master of Science degree in medical physics.
Master of Science degree in physics.
Major in physics with the B.A. degree in liberal arts and sciences.
Major in physics with the B.S. degree in applied arts and sciences.
Major in chemical physics with the B.S. degree
in applied arts and sciences.
Teaching major in physical science in preparation for the single subject teaching credential in science/physical science. Minor in physics.
Certificate in residency training in radiation therapy physics (refer to the Graduate Bulletin).

## The Major

The study of physics is considered the foundation of modern science. It has fascinated the finest minds of every age - from Newton to Maxwell, Einstein, Bohr, Schroedinger, Oppenheimer and Schwinger. The study of this diverse field encompasses such areas as optics, electricity, magnetism, the properties of the solid state, atomic structure, nuclear structure, motion, relativity, space and time. Physics also plays a significant role in chemistry, biology, astronomy, and geology, and in the applied sciences of engineering and technology.

Students who become physics majors will be selecting a rewarding and vital career. The great burst of activity during the last 20 years has instilled a new excitement in physics. For example, the invention of the laser in the late 1950s revolutionized the field of optics. These advances stimulated whole new areas in physics applications. Superconductivity has led to the search for a high-temperature superconductor so that electrical power might be transmitted without loss; quantum mechanical tunneling has led to the tunnel diode; and solid state physics brought about the transistor and its successors.

The career opportunities for physics graduates are as diverse as the field itself. They include research and development; management or administration in industrial laboratories or government agencies; technical sales; electronic design; laser instrument research; and secondary teaching.

## Impacted Program

The majors in the Department of Physics are impacted. To be admitted to one of the majors in the department, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Physics Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 19021) (SIMS Code: 777702)
All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." A master plan of the courses taken to fulfill the major must be approved by the undergraduate adviser. No more than 48 units in physics courses can apply to the degree.

A minor is not required with this major.
Preparation for the Major. Physics 195, 195L, 196, 196L, 197, 197L; Chemistry 200; Mathematics 150, 151, 252. (29 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to the section of this catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 34 upper division units to include Physics 311, 317, 350, 354, 357, 360, 400A-400B, 410; Mathematics 342A, 342B.

## Physics Major

With the B.S. Degree in Applied Arts and Sciences

## (Major Code: 19021)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." A master plan of the courses taken to fulfill the major must be approved by the undergraduate adviser.

A minor is not required with this major.

## Basic Requirements for all Students

Preparation for the Major. Physics 195, 195L, 196, 196L, 197, 197L; Chemistry 200; Mathematics 150, 151, 252. (29 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of $C$ (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 46 upper division units to include Physics 311, 317, 350, 354, 357, 360, 400A-400B, 410, 498A, 498B; Mathematics 342A, 342B. In addition, the student must complete the requirements for either one of the following areas:

## A. General Physics

(SIMS Code: 777701)
Nine units of elective coursework in physics or related areas. Electives must be approved by the Physics department undergraduate adviser.

## B. Modern Optics

(SIMS Code: 777728)
Required: Physics 406, 552, 553.

## Chemical Physics Major

With the B.S. Degree in Applied Arts and Sciences
(Major Code: 19081) (SIMS Code: 772801)
All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." A master plan of the courses taken to fulfill the major must be approved by the undergraduate adviser.

A minor is not required with this major.
Preparation for the Major. Physics 195, 195L, 196, 196L, 197, 197L; Chemistry 201, 202, 232, 232L, 251; Mathematics 150, 151, 252. (42 units)

Recommended: A course in computer programming.
Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Physics 311, 350, 400A, 410; Chemistry 410A-410B, 417, 550; Mathematics 342A, 342B; three units selected from Physics 357, 360, 400B, Chemistry 432, 432L, 457, 510, Physics 538 [or Chemistry 538]; and Research Project: Chemistry 497 (3 units) or Chemistry 498 (3 units) or Physics 498A and 498B (3 units).

## Physical Science Major

In preparation for the Single Subject Teaching Credential in Science/Physical Science
With the B.A. Degree in Applied Arts and Sciences
(Major Code: 19011) (SIMS Code: 777303)
All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of the catalog on "Graduation Requirements." Candidates may complete one of their two American Institutions courses at the upper division level or satisfy the California state and local government portion of American Institutions by passing the California Government examination available through the Testing Services office.

A minor is not required for this major.
Preparation for the Major. Africana Studies 140 or Chicana and Chicano Studies 111A or Communication 103; Astronomy 109, 201; Biology 203, 203L, 204, 204L; Chemistry 200, 201; Mathematics 150, 151, 252; Physics 195, 195L, 196, 196L, 197, 197L; Teacher Education 211B (1 unit). (50 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of $C(2.0)$ or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 32 upper division units to include Geological Sciences 412; Mathematics 342A; Physics 311, 317, 350, 354, 357, 360, 400A, 499 (History of Science and Technology).

Additional Requirements for Teaching in California. In order to teach science and physics in California public schools, candidates must also complete a fifth-year, post-baccalaureate program to earn a single subject teaching credential. Completion of the physical science major provides the breadth needed for teaching interdisciplinary science in middle school and high school, as well as the depth needed for teaching physics in high school. It also prepares candidates to pass the California Subject Examinations for Teachers (CSET) required for entry into a post-baccalaureate credential program. See the Department of Dual Language and English Learner Education and/or the School of Teacher Education for additional requirements needed to enter a California fifthyear program.

## Additional Requirements for Subject Matter Preparation Certification

Satisfactory Grades. At most one course with a C- or lower among the courses listed under Preparation for the Major, and at most one course with a C- or lower among the courses listed under the Major. If a course is repeated, the highest grade will count.

Formative Assessment. Completion of a satisfactory, preliminary portfolio two semesters prior to graduation. Contact the subject matter preparation adviser for information.

Summative Assessment. Completion of a satisfactory, final portfolio and a positive recommendation from the instructor of Physics 357.

## Physics Minor

## (Minor Code: 19021) (SIMS Code: 777701)

The following courses are prerequisites to the physics minor and do not count toward the 15 units required for the minor. Physics 195, 195L, 196, 196L, 197, 197L; Mathematics 150, 151, 252.

The minor in physics consists of a minimum of 15 units to include Physics 350, 354, 360, 400A; Mathematics 342A.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Courses (PHYS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

NOTE: Maximum credit 12 units for any combination of Physics 180A, 180B, 182A, 182B, 195, 195L, 196, 196L, 197, 197 L.
PHYS 180A. Fundamentals of Physics (3)
Prerequisite: Satisfaction of the SDSU Mathematics/Quantitative Reasoning Assessment requirement. Physics 180A is prerequisite to 180B. Recommended: Concurrent registration in Physics 182A.

Mechanics, wave motion, sound, and fluids. Physics 180A not open to students with credit in Physics 195. Biological sciences majors must complete entire sequence of Physics 180A-180B or Physics 195, 196, 197.

## PHYS 180B. Fundamentals of Physics (3)

Prerequisite: Satisfaction of the SDSU Mathematics/Quantitative Reasoning Assessment requirement. Physics 180A is prerequisite to 180B. Recommended: Concurrent registration in Physics 182B.

Electricity, magnetism, optics, and modern physics. Presented in a two-semester algebra/trigonometry based sequence. Physics 180B not open to students with credit in Physics 196. Biological sciences majors must complete entire sequence of Physics 180A-180B or Physics 195, 196, 197.

## PHYS 182A. Physical Measurements Laboratory (1)

Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Physics 180A.
A laboratory course to accompany Physics 180A-180B. Properties of matter, mechanics, sound, and wave motion. Not open to students with credit in Physics 195L.
PHYS 182B. Physical Measurements Laboratory (1)
Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Physics 180B.
A laboratory course to accompany Physics 180A-180B. Electricity, DC circuits, oscilloscope measurement techniques, electric and magnetic fields, and optics. Not open to students with credit in Physics 196L.
PHYS 195. Principles of Physics (3)
Prerequisites: High school physics or Physics 180A. Mathematics 150 with a minimum grade of $C$.

Fundamental principles of physics in areas of mechanics and oscillatory motion. Designed for students requiring calculus-based physics.

## PHYS 195L. Principles of Physics Laboratory (1)

Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Physics 195.
Experiments in mechanics, wave motion, resonance phenomena using precision air tracks. Not open to students with credit in Physics 182A.

## PHYS 196. Principles of Physics (3)

Prerequisites: Physics 195 and Mathematics 151
Fundamental principles of physics in areas of electricity and magnetism. Designed for students requiring calculus-based physics.

## PHYS 196L. Principles of Physics Laboratory (1)

Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Physics 196.
Experiments in DC circuits, AC circuits, electrical resonance, oscilloscope measurement techniques, and electric and magnetic fields. Not open to students with credit in Physics 182B.

## PHYS 197. Principles of Physics (3)

Prerequisite: Physics 196.
Fundamental principles of physics in areas of electromagnetic waves, modern physics, optics, relativity, thermodynamics, and wave motion. Designed for students requiring calculus-based physics.

## PHYS 197L. Principles of Physics Laboratory (1)

Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Physics 197.
Experiments in optics, lasers, holography, and nuclear counting.

## PHYS 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## PHYS 299. Special Study (1-3)

Prerequisites: Consent of department chair and instructor. Individual study.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

## PHYS 311. Electronics for Scientists (4)

Three lectures and three hours of laboratory. Prerequisites: Physics 180B and 182B, or 196 and 196L.
AC and DC circuits, diodes, transistors, conventional and operational amplifiers, analog to digital conversion, pulse and digital electronics. Introduce science majors to modern electronic devices and their utilization in scientific instrumentation.
PHYS 317. Introduction to Computational Physics (3)
One lecture and six hours of laboratory.
Prerequisites: Physics 197 and Mathematics 342A.
Numerical methods applied to a variety of physics topics. Use of computers to solve and plot problems involving differential equations, matrices, root finding, numerical integration.

## PHYS 350. Classical Mechanics (3)

Prerequisites: Physics 195 with a minimum grade of $C$ and Physics 197. Credit or concurrent registration in Mathematics 342A.

Newtonian mechanics, gravitation, small oscillations, collisions, motion of rigid bodies, Lagrangian mechanics.
PHYS 354. Modern Physics (3)
Prerequisites: Physics 197 and Mathematics 252 with a grade of C (2.0) or better in each course. Credit or concurrent registration in Mathematics 342A.

Special theory of relativity. Particle properties of electromagnetic radiation, and wave properties of particles. Introduction to quantum theory with applications to atomic structure.
PHYS 357. Advanced Physical Measurements (3)
One lecture and six hours of laboratory.
Prerequisites: Physics 197L, 311, 354, and Chemistry 200.
Stresses both laboratory experiments and techniques of data and error analysis. Experiments are taken from major areas of physics.

PHYS 360. Thermal Physics (3)
Prerequisites: Physics 350, Mathematics 342A, Physics 354 or Chemistry 410A.

Classical thermodynamics and statistical mechanics. Applications of equilibrium thermodynamics. Statistical mechanics, including concepts from probability and statistics. Maxwell-Boltzmann, Fermi-Dirac, and Bose-Einstein statistics. Applications of statistical mechanics in calculating macroscopic properties of simple systems.

## PHYS 400A-400B. Classical Electromagnetism (3-3)

Prerequisites for Physics 400A: Physics 196 with a minimum grade of C; Physics 197 and Mathematics 342A. Physics 400A is prerequisite to Physics 400B.

Electrostatics, magnetostatics, electromagnetic induction, Maxwell's equations, radiation and wave propagation.

## PHYS 406. Optics (3)

Prerequisites: Physics 197, 197L, Mathematics 342B.
Reflection, refraction, matrix methods, dispersion, polarization, double refraction, interference, diffraction, Fourier optics, coherence theory, lasers, and holography with applications to optical instruments, wave propagation, and the nature of light.

## PHYS 410. Quantum Mechanics (3)

Prerequisites: Physics 350, Mathematics 342B, Physics 354 or Chemistry 410A.

Mathematical and physical foundations of quantum theory in terms of wave and matrix mechanics. Applications to properties of atoms and solids.

## PHYS 412. Processes and Inquiry in Physics (4)

Three lectures and two hours of activity.
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning.

Investigation of processes of inquiry and rational thinking skills characteristic of physics, focusing on energy transformations, heat transfer and thermodynamics, force and motion, electricity and magnetism, and waves.

## PHYS 496. Selected Topics in Physics (1-4)

Prerequisite: Consent of instructor.
Selected topics in classical and modern physics. May be repeated with consent of instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

## PHYS 498A. Senior Research (1) Cr/NC

One discussion period and two additional hours per week to be arranged.

Prerequisites: Physics 357 and consent of instructor.
Selection and design of individual research project. Oral and written progress reports.

## PHYS 498B. Senior Research (2)

Two discussion periods and four additional hours per week to be arranged.

Prerequisite: Physics 498A.
Laboratory work, progress reports, oral and written final reports.
PHYS 499. Special Study (1-3)
Individual study or laboratory work on a special problem in physics selected by the student. Each student will be assigned a member of the staff who will supervise his/her work. Credit, hours and topics to be arranged in each case. Maximum credit six units.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

## PHYS 532. Condensed Matter Physics (3)

Prerequisite: Physics 410 with a grade of $C(2.0)$ or better; or graduate standing.

Elastic, electric, magnetic, optical, and thermal properties of solids. Energy band theory of solids and practical application with metals and semiconductors.

## PHYS 538. Polymer Science (3)

(Same course as Chemistry 538)
Prerequisites: Chemistry 200 or 202; and credit or concurrent registration in Chemistry 410B or Physics 360 or Mechanical Engineering 350.

Structure, synthesis, physical properties, and utilities of polymers and biopolymers.
PHYS 552. Modern Optics and Lasers (3)
Prerequisites: Physics 406 with minimum grade of C ; credit or concurrent registration in Physics 400B.

Electromagnetic theory, matrix methods of optics, propagation of Gaussian beams, optical resonators, interaction of radiation and atomic systems, theory of laser oscillation, nonlinear optics, specific laser systems, optical detectors, applications of lasers in physics.
PHYS 553. Modern Optics Laboratory (3)
One lecture and six hours of laboratory.
Prerequisites: Physics 357 with minimum grade of C ; Physics 406 with minimum grade of C ; credit or concurrent registration in Physics 552.

Experiments in various fields of modern optics such as holography, physics of lasers, Fourier transform spectroscopy, Raman spectroscopy, light modulation techniques, fiber optics, spatial filtering, diffraction grating spectroscopy, radiometry, and nonlinear optics.

## PHYS 560. Radiological Physics and Dosimetry (3)

Prerequisite: Credit or concurrent registration in Physics 354.
Ionizing radiation fields, interactions of radiation with matter, cavity theory, external radiation dosimetry.

## PHYS 564. Nuclear Physics (3)

Prerequisite: Credit or concurrent registration in Physics 410.
Nuclear and elementary particle phenomena including nuclear structure, decay, and radioactivity. Nuclear reactions and devices. Experimental methods and applications.

## PHYS 565. Radiobiology and Radiation Safety (3)

Prerequisites: Credit or concurrent registration in Physics 560 and consent of instructor.

Effects of ionizing radiation on physical and biological systems in medical imaging and radiation therapy. Associated radiation safety precautions.

## PHYS 567. Nuclear Medicine Physics (3)

Prerequisite: Physics 560.
Physical principles of nuclear medicine and operating principles of nuclear medicine instrumentation. Radionuclide production, dose calibrators, well counters, gamma cameras, SPECT, PET, image quality, tomographic reconstruction, and image processing.

## PHYS 570. Relativity (3)

Prerequisites: Physics 354 and 400B.
Relative coordinates, Lorentz transformation, covariant formation of the laws of physics, applications of special relativity, introduction to curved space time, cosmology.

## PHYS 580. Computational Physics (3)

Prerequisites: Physics 354; Computer Engineering 160; and credit or concurrent registration in Physics 400A.

Computer programming for numerical solution of problems in classical mechanics, electromagnetism, optics, and quantum mechanics. Use of Fortran and $C$ programming languages and the UNIX operating system. Incorporation of standard subroutines for linear algebra and differential equations into student written programs.

PHYS 596. Special Topics in Physics (1-4)
Prerequisite: Consent of instructor.
Selected topics in classical and modern physics. May be repeated with the consent of the instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

# Political Science 

## OFFICE: Nasatir Hall 126

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Faculty
Emeritus: Fairlie, Gupta, Heck, Hobbs, Hofstetter, Keiser, King, Lewin, Little, Loveman, Miles, Schultze, Soule, Strand
Chair: Abdel-Nour
Professors: Abdel-Nour, Adams, Alexseev, Carruthers, Graubart,
Guang, Kuru, McCall, Saccarelli, Schreiber, Varadarajan
Associate Professors: Fletcher, Kennedy, Maher
Assistant Professors: Gonzalez O'Brien, O'Brien, Twist
Lecturers: Gastelum, Greb, Ingram, Mercurio, Murren, Samstad, Smith

## Offered by the Department

Master of Arts degree in political science.
Major in political science with the B.A. degree
in liberal arts and sciences.
Minor in political science.
Certificate in human rights.
Certificate in public law.

## The Major

Political science is the study of governments. Its concerns, however, are not limited to formal governmental institutions such as the executive and legislative branches or the justice systems. Political science is also interested in other organizations and activities which are part of the process of government, including political parties, interest groups, and the press.

Students who become political science majors will learn about who creates the rules by which people are governed, the attitude and behavior of leaders and members of the public which cause certain decisions to be made, and how these decisions affect such values as liberty, equality, welfare, and justice. Political science is concerned with contemporary public affairs, problems in other political systems and contemporary international politics, as well as with historical growth, evolution, and decline of various types of governments.

The many career opportunities which might be available to political science graduates include teaching at the secondary level; positions with the federal government in areas such as intelligence, foreign affairs, environmental protection, civil rights and civil liberties, and budget and computer administration; positions with state and local governments, including administrative aide for a city manager, staff assistant for a county supervisor, and assistant to the registrar of voters; administrative positions on the staffs of national, state, and local legislators; statistical technician; marketing researcher; lobbyist for a business, non-profit or trade organization; community organizer and/or service provider and political reporter.

## Impacted Program

The political science major is an impacted program. To be admitted to the political science major, students must meet the following criteria:
a. Complete with a grade of $\mathrm{C}(2.0)$ or better: Political Science 101, 102, either 103 or 104, and three units of either statistics or logic (Political Science 201; Economics 201; Psychology 280; Sociology 201; Statistics 119, 250; Philosophy 120). These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Have a cumulative GPA of 2.40 or better.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser in order to declare or change the major.

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Political Science Major

## With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 22071) (SIMS Code: 115501)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." A total of 40 upper division units must be taken, of which 27 must be selected as described in the major. No more than 48 units in political science courses can apply to the degree.

A minor is not required with this major.
Preparation for the Major. Political Science 101, 102, either 103 or 104, and three units of either statistics or logic (Political Science 201; Economics 201; Psychology 280; Sociology 201; Statistics 119, 250; Philosophy 120). (12 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$. The minimum grade in each class is $C$ (2.0) or better.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing Political Science 390W or another approved upper division writing course (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. The department encourages international experience for its majors. It will facilitate the transfer of political science credits for appropriate study abroad, student exchange, or other overseas programs. International internships may also receive political science credit, if approved in advance by a department adviser.

Major. A minimum of 27 upper division units to include 24 upper division units in political science (excluding Political Science 390W). Students may take up to six units selected from Africana Studies 321, 322, American Indian Studies 485, and Women's Studies 375 , provided that at least three units are taken in each field; and a three unit capstone requirement, fulfilled by Political Science 495, 497B, 498, or any 500-level political science course excluding Political Science 516.
Field I. Political Theory: Political Science 301A-301B, 302, 305, 406, 507, 510.
Field II. American Politics: Political Science 320, 321, 322, 331 [or American Indian Studies 331], 333, 334 [or Sustainability 334], $335,336,338,346,347 A-347 B, 348,422,425,426,428,430$ [or Latin American Studies 430], 435, 436, 440 [or Geography 440], 530, 531, 533, 535, 541.
Field III. Comparative Politics: Political Science 356, 359, 361, 362, 363, 364, 365, 366 [or Latin American Studies 366], 370, 555, 560, 562, 564, 565, 566, 568.
Field IV. International Politics: Political Science 375, 380, 393, 479, 482, 485, 575, 577.

## Political Science Minor

(SIMS Code: 115501)
The minor in political science consists of a minimum of 21 units in political science to include Political Science 101, 102, and either 103 or 104. Twelve of the 21 units must be in upper division courses (excluding Political Science 390W) and at least nine of these units must be selected from one of the following subject matter areas (a or b or c) as listed in the major.
a. Political Theory (Field I)
b. American Politics (Field II)
c. Comparative Politics and International Politics
(Fields III and IV)

International Experience. The department encourages international experience for students in the political science minor. It will facilitate the transfer of political science credits for appropriate study abroad, student exchange, or other overseas programs. International internships may also receive political science credit, if approved in advance by a department adviser.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Human Rights Certificate <br> (SIMS Code: 115527)

The Certificate in Human Rights encourages students to take multidisciplinary courses offered by the College of Arts and Letters with human rights content to obtain multiple perspectives on economic, political, social, and other factors that affect efforts to promote human rights. The certificate program allows students to gain specialized knowledge of human rights and recognition on their transcripts.

The certificate requires 15 units to include Political Science 380 and 12 units selected from Africana Studies 322, 380, 422, Chicana and Chicano Studies 405, European Studies 440, Geography 440 [or Political Science 440], History 440, 557, International Security and Conflict Resolution 324, Latin American Studies 350, 430 [or Political Science 430], Lesbian, Gay, Bisexual, and Transgender Studies 321, Philosophy 340, 344, 510, 512, Political Science 104, 347B, Sociology 355, Women's Studies 520, 530. Students must obtain a grade of $C$ (2.0) or better in each of the certificate courses. Courses taken for a major or minor may apply to the certificate. Students may obtain the Certificate in Human Rights without majoring in political science or another major in the College of Arts and Letters. Contact the Department of Political Science for additional information.

## Public Law Certificate

(SIMS Code: 115526)
The Certificate in Public Law offers courses in the College of Arts and Letters with law content. Students specialize in public law to obtain multiple perspectives on the use of law to regulate social problems; to strengthen critical thinking skills; and to learn to form and defend arguments.

The certificate requires 15 units to include Political Science 346 and 12 units selected from Africana Studies 380, American Indian Studies 485, Philosophy 341, 342, 510, Political Science 347A, 347B, 348, 541, 577, Sociology 443, 543, Women's Studies 370. Students must obtain a grade of C (2.0) or better in each of the certificate courses. Up to nine units in the certificate may count towards the political science major but may not count towards the political science minor. Students may obtain the Certificate in Public Law without majoring in political science or another major in the College of Arts and Letters. Contact the Department of Political Science to enroll in the certificate program or for additional information.

## Courses (POL S)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

## POL S 101. Introduction to American Politics in Global

Perspective (3) [GE-AI]
Politics and basic political concepts as applied to the American political system. American political system as a constitutional democracy viewed in historical and comparative perspectives and within context of the global system. When taken with Political Science 102 will satisfy graduation requirement in American Institutions.

POL S 102. Introduction to American and California Government and Politics (3) [GE-AI]
Political processes and institutions in the United States and California. Considers a variety of public policy issues such as environmental quality, health, education, relation between government and business, taxation, and foreign affairs as reflected in the dynamics of national and state politics. When taken with Political Science 101 will satisfy graduation requirement in American Institutions.

## POL S 103. Introduction to Comparative Politics (3) [GE]

Analytical models and techniques for examination of problems of decision making and control in various political systems. Emphasis on patterns of political action in various cultural contexts.

## POL S 104. Global Politics (3) [GE]

Basic concepts, terms, and institutions of global politics. Explores power and inequality in the global system in a variety of issue areas, such as war and diplomacy, human rights, migration, the global economy, development, and the environment.
POL S 201. Elementary Statistics for Political Science (3) [GE]
Quantitative methods in political science. Tabular and graphic presentation, measures of central tendency, simple correlation and sampling techniques. Students with credit or concurrent registration in the following lower division statistics courses will be awarded a total of four units for the two (or more) courses: Political Science 201; Administration, Rehabilitation and Postsecondary Education 201; Biology 215; Civil Engineering 160; Economics 201; Linguistics 270; Psychology 280; Sociology 201; Statistics 119, 250.
POL S 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## Field I: Political Theory

## UPPER DIVISION COURSES

(Intended for Undergraduates)
POL S 301A-301B. History of Western Political Thought (3-3) [GE]
Development of political ideas from the Golden Age of Greece until the French Revolution. Relevance of theory to a critical understanding of concrete political and social problems involving power, freedom, equality, justice and action. Political Science 301A emphasizes Plato, Aristotle, Augustine, Aquinas, and Marsilius of Padua. Political Science 301B stresses major political theorists such as Machiavelli, Hobbes, Locke, and Rousseau.
POL S 302. Modern Political Thought (3) [GE]
Major writers of political thought in the last two centuries, including Burke, J.S. Mill, Freud, Marx, Weber and Sartre. The following topics may be covered: conservatism, liberalism, utilitarianism, socialism, fascism, positivism and existentialism.

## POL S 305. American Political Thought (3) [GE-AI]

Origin and development of American political ideas from colonial times to the present. Meets the graduation requirement in the United States Constitution. When taken with Political Science 320, 321 or 422, will also satisfy graduation requirements in American Institutions.

## POL S 406. Democracy and Mass Society (3)

Origins and development of democracy as an idea and political reality. Historical and ongoing struggles for mass democracy to include the English Civil War, the Haitian and Russian Revolutions, and the Spanish Civil War.

## UPPER DIVISION COURSES

(Intended for Senior and Graduate Students) (Also Acceptable for Advanced Degrees)

## POL S 507. Marx and Marxism (3)

Prerequisite: Three units in political theory.
Marxism examined as an important tradition of political thought and as a political movement. Theoretical and political debates in the development of Marxism, including works by Marx, Engels, Luxemburg, Lenin, and Trotsky. Contemporary significance of Marxism.

POL S 510. Contemporary Political Thought (3)
Prerequisite: Political Science 301B or 302 or 305 or 406.
Contemporary political questions and theoretical attempts to address them. Debates about justice, citizenship, and multiculturalism; as well as controversies over nature and scope of politics.

## Field II: American Politics

## UPPER DIVISION COURSES

(Intended for Undergraduates)
POL S 320. The U.S. Constitution (3) [GE-AI]
Principles inherent to the constitutional framework in the United States, the controversies accompanying those principles, and the political institutions that have developed under them. Meets the graduation requirement in the United States Constitution and California state and local government. When taken with Political Science 305 , 321 or 422 , will also satisfy graduation requirements in American Institutions.

## POL S 321. State Politics (3) [GE-AI]

Politics and policy making at the state and local levels, relations among national, state, and local governments. Emphasis on California problems and politics. Meets the graduation requirement in California government. When taken with Political Science 305 or 320, will also satisfy graduation requirements in American Institutions.

## POL S 322. Politics and Conflict (3)

Prerequisite: Political Science 102.
Nature of interpersonal, group, and societal conflict and mechanisms that can facilitate conflict resolution and bargained agreement.
POL S 331. American Indian Political Experience (3) [ES]
(Same course as American Indian Studies 331)
Prerequisite: Political Science 102 or American Indian Studies 110.

Social and political responses to dominant group policies by American Indian as compared to other minority groups.
POL S 333. Politics of Race and Ethnicity (3)
Prerequisite: Political Science 102.
Complexity of identity politics, addressing issues as discrimination, integration, immigration, and fair political representation.

## POL S 334. Politics of the Environment (3) [GE]

(Same course as Sustainability 334)
Environmental politics and policy in historical and comparative non-dominant perspective. Alternative environmental world views, cases/materials on sustainability, climate change, social and racial justice, globalization and developing nations.
POL S 335. Public Policy (3)
Prerequisite: Political Science 102.
Principles and practice of American policy making, to include analysis of social problems and the policies developed to address them.

## POL S 336. Women's Issues in the American Political

 Process (3) [GE]American politics and public policy debates around women participating in politics, including support of and restrictions to feminism, legal strategies, and new understandings of public and private issues.
POL S 338. The Legislative Process (3)
Detailed analysis of legislatures. Special attention devoted to impact of dynamic factors on formal procedures. May include a substantial amount of material about foreign political systems.

## POL S 346. Law and the Political System (3)

Courts as political institutions and judges as political actors. Dynamics of civil and criminal litigation. Law and politics, judicial selection, and impact of political factors on judicial decisions.
POL S 347A. American Constitutional Law: Institutional Powers and Constraints (3) [GE-AI]
Substantive principles of American constitutional law. Constitutionally provided powers of and constraints on government action as defined by the United States Supreme Court. May include study of judicial review, commerce clause, federalism, and separation of powers. Satisfies graduation requirement in United States Constitution.

POL S 347B. American Constitutional Law: Civil Rights and Civil Liberties (3) [GE-AI]
Substantive principles of American constitutional law. Civil rights and liberties protected by the Constitution against government action. May include discussion of freedom of speech, religion, press, assembly, as well as defendants' rights and protection from discrimination. Satisfies graduation requirement in United States Constitution.

## POL S 348. The Supreme Court and Contemporary Issues (3)

Recent decisions of the Supreme Court of the United States and their relationship to contemporary political and social issues. Not open to students with credit in both Political Science 347A and 347B.

## POL S 422. Urban Politics (3) [GE-AI]

Politics and policy issues in urban areas to include central cities and suburbs. Urban sprawl, suburbanization, local/state/federal relations, regional governance, and local electoral dynamics. Urban policy issues to include public safety, housing, and transportation. Meets graduation requirement in California state and local government. Will satisfy all requirements in American Institutions when taken with Political Science 102, 305, or 320.

## POL S 425. Psychology of Politics (3)

Prerequisite: Political Science 102.
Psychological and social roots of behavior of activists, elected officials, and the mass public. Applications in political science to include campaigns and elections, discrimination, political conflict, public opinion, public policy, and social justice.

## POL S 426. Political Communication (3)

Communication as a political process; the effects of political communication on individuals and groups. May include a substantial amount of material about foreign political systems.

## POL S 428. Campaigns and Elections (3)

Prerequisite: Political Science 102.
Campaigns and elections are essential to proper functioning of democracy. Theories concerning decision-making processes of individual voters, actors who seek to influence electoral outcomes, and the strategies used by organized political campaigns in attempt to affect voting behavior.
POL S 430. Immigration and Border Politics (3) [GE]
(Same course as Latin American Studies 430)
Prerequisite: Completion of the American Institutions requirement.
U.S. immigration and border politics within a global and historical perspective. Transformations of sovereignty, communities, identity, and rights within an era of mass migration and economic interdependence. Policy and popular debates about admission, border control, and the incorporation of migrants.
POL S 435. Power and Poverty in the United States (3) [GE]
Impact of government upon income inequality and poverty in the United States. Examines programs of U.S. welfare state in comparative perspective and their successes and failures. Minimum standards for distributional justice and inquiries into obligations we have toward our fellow citizens.

## POL S 436. The American Presidency (3)

Prerequisites: Political Science 101 and 102.
Analysis of principal institutions, functions and problems of the presidency and federal executive branch. Attention given to presidential leadership, staffing, executive-legislative relations and policy formation.

## POL S 440. Food Justice (3)

## (Same course as Geography 440)

Prerequisite: Political Science 102 or Geography 102.
Food justice from perspectives of theory, institutions, markets, law, ethics, social mobilization, politics, and ecology. Political strategies, capabilities of food justice organizations; movements aimed at creating fair, healthy, sustainable food systems locally and globally.

## UPPER DIVISION COURSES

(Intended for Senior and Graduate Students)
(Also Acceptable for Advanced Degrees)

## POL S 530. Political Parties (3)

Prerequisite: Political Science 102 or 320.
The political party as a part of the process of government; party organization and activities; nominating and campaign methods; theories and functions of the party system; party responsibility. The functioning of political parties in the American political system. May include a substantial amount of material about foreign political systems.
POL S 531. Interest Groups and Political Movements (3)
Prerequisite: Political Science 101 or 102.
Pressure group activity, lobbies, mass movements; factors which explain origins and motivations of group behavior; votes, money, information, protest as political resources; theories of pluralism, power elite and mass society; class and ethnic politics. May include a substantial amount of material about foreign political systems.
POL S 533. Democracy in America (3)
Prerequisite: Political Science 102 or 320.
Quality and quantity of democratic experience in contemporary America. Construction of American regime, arrangement of power within that regime, expansion and contraction of citizen participation, and principles that Americans generally espouse.

## POL S 535. Gender and Politics (3)

Prerequisites: Political Science 101 and 102.
How gender matters in understanding key political science concepts including democracy, public/private participation and representation. Women involved in political institutions as elected officials, activists, and policy makers from U.S. and comparative perspectives.

## POL S 541. Special Problems in Public Law (3)

Prerequisite: Three units selected from Political Science 346, 347A, 347B, or 348.

Issues of contemporary relevance in field of public law, examining legal, moral, and political implications.

## Field III: Comparative Politics

## UPPER DIVISION COURSES

(Intended for Undergraduates)

## POL S 356. Politics of Europe (3) [GE]

The politics and government systems of Europe, addressing differences and similarities across the advanced industrial countries of the region and the evolving role of the European Union.
POL S 359. Government and Politics of Russia and the

## Commonwealth (3) [GE]

Contemporary developments in Russia and states of former Soviet Union. Focus on Gorbachev era and post-Gorbachev transformations of political, economic, and social systems.
POL S 361. Governments and Politics of the Developing
Areas (3) [GE]
Prerequisite: Political Science 101 or 103.
Internal political systems, governmental structures and the foreign policies of developing nations.
POL S 362. Governments and Politics of East Asia (3) [GE]
The internal political structure and foreign policies of China, Japan, and Korea.
POL S 363. Governments and Politics of the Middle East (3) [GE] The governmental and political structures of representative states in the Middle East including Turkey, Israel, and the Arab states.

## POL S 364. Political Change in Modern Africa (3)

Dynamics of social and political change in modern Africa.
POL S 365. Chinese Politics (3) [GE]
Government and political changes in China and Taiwan since 1949; state-society relations and economic development in China and Taiwan; relationship between mainland China, Taiwan, and world powers.

POL S 366. Latin American Politics (3)
(Same course as Latin American Studies 366)
Introduction to Latin American politics. Knowledge of political change and political systems in Latin America, viewed historically and comparatively, using concepts and theories applicable to more general political analysis.

## POL S 370. Political Violence (3) [GE]

Prerequisite: Political Science 101, 102, or 103.
Underlying conditions, expressions, and consequences of violence within political systems.

## UPPER DIVISION COURSES

(Intended for Senior and Graduate Students)
(Also Acceptable for Advanced Degrees)
POL S 555. Comparative Political Systems (3)
Prerequisite: Political Science 103.
An examination of selected political and governmental systems for purposes of comparative study and analysis to determine similarities, differences and general patterns and universals among political systems.
POL S 560. Comparative Public Policy (3)
Prerequisite: Political Science 103 or 335.
How political, social, and economic forces shape public policy in selected countries. Focus on policies related to minority and immigrant populations, environment, or poverty.
POL S 562. Religion and Politics in Comparative Perspective (3) Prerequisite: Political Science 103.
Various types of relationships between contemporary states and religious institutions. Concepts and theories on religion and politics. Cases of state-religion interaction.
POL S 564. Political Ecology of Latin America (3)
Prerequisite: Upper division or graduate standing.
Ecology and politics of Latin America and the Caribbean. Environmental politics with related policy challenges of economic growth, equity, and social justice.
POL S 565. Nations and Nationalism (3)
Prerequisite: Upper division or graduate standing.
Debates surrounding origins, meaning and future of nationalism, and its most common embodiment, the nation-state form. Theoretical analyses of phenomenon and empirical case studies.

## POL S 566. Political Change in Latin America (3)

Prerequisite: Political Science 101 or 103.
General pattern of politics and political development in Latin America with an emphasis on those features which condition domestic and foreign policy making.

## POL S 568. Mexican Politics (3)

Prerequisite: Political Science 101 or 103.
Principal factors in Mexican governmental decision making. Ideology, political groups, tactics of leaders and governmental structure.

## Field IV: International Politics

UPPER DIVISION COURSES
(Intended for Undergraduates)
POL S 375. International Relations: Theory and Practice (3)
Prevailing and critical theories of international relations and application to historical developments and contemporary issues in global affairs.
POL S 380. Human Rights in a Global Perspective (3)
Historical development of international human rights standards and global, political, moral, and legal debates concerning when and how to implement human rights standards.
POL S 393. Hostler Institute on World Affairs (3)
Exploration of a particular theme in global politics, such as global justice. Selected weeks of guest lectures from prominent scholars, diplomats, and activists.
POL S 479. National Security Policy (3)
Objectives, instruments, and consequences of national security policy.

## POL S 482. United States-Latin American Relations (3)

Diplomatic, military, and political relations between the United States and Latin America. Cold War and its legacies, colonialism and dependency, counter-insurgency, counter-narcotics, and counter-terrorism; economic relations, human rights, military intervention, popular movements, and revolutions.

## POL S 485. Politics of Globalization (3)

Prerequisite: Political Science 103 or six units of political science. Ideas and practice of globalization since end of World War II, focusing on political debate around contemporary changes in trade, production, and global social relations, and on impact of globalization on political institutions such as state, civil society, social movements, and democracy.

## UPPER DIVISION COURSES

(Intended for Senior and Graduate Students)
(Also Acceptable for Advanced Degrees)
POL S 575. International Relations of the Pacific Rim (3)
Prerequisite: Political Science 362 or 375.
Dynamics of conflict and cooperation among nations of the Pacific Rim. Stress on political and economics factors that shape interstate relations.

## POL S 577. Politics of International Law (3)

Relationship of international law to politics. Fundamental principles of international law and normative theories of international law and politics. Historical and contemporary issues.

## Elective Courses

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

POL S 300. Islam and Politics (3) [GE]
Concepts, interactions, and theories between Islamic actors and political institutions. Islam-state relations.

## POL S 357. British Politics (3)

History and institutions of the British political system. The monarchy, nationalism and devolution, political parties, relationships with the European Union and Ireland, and the Westminster model of politics.

## POL S 390W. Writing About Politics (3)

Prerequisites: Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a grade of C (2.0) or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Writing in various political contexts and settings. Citing sources appropriately, critiquing opposing viewpoints, developing coherent political arguments, providing evidence to support conclusions, and revising. This course may not be used toward the major or minor in political science.
POL S 450. Study Abroad in Political Science (3)
Prerequisite: Upper division standing. See Class Schedule for additional prerequisites.

Selected topics in political science. Course taught abroad through a program approved by political science department to include SDSU faculty-led courses abroad. International internships may receive political science credit. May be repeated with new content. See Class Schedule for specific content and geographic location. Maximum credit six units.

## POL S 495. Internship in Local Politics (3)

Prerequisites: Limited to senior political science majors; three upper division units within Field II.

Seniors in the major choose internships within San Diego County in government agencies, offices of elected officials, or others approved by instructor. Requires 80 hours of fieldwork and periodic analytical essays.

## POL S 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content and used for field-specific credits for the major as approved by the department. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## POL S 497A. Senior Thesis Preparation (3)

Prerequisites: Upper division standing and consent of department thesis adviser. Limited to political science majors with a cumulative 3.0 GPA in upper division political science courses.

Preparation for written thesis to include full literature review and formal research proposal. To be taken prior to Political Science 497B. Not open to students with credit in Political Science 497B.

## POL S 497B. Senior Thesis (3)

Prerequisites: Political Science 497A and consent of department thesis adviser. Limited to senior political science majors with a cumulative 3.0 GPA in upper division political science courses.

Completion of written thesis. Satisfies capstone requirement for political science majors. Can only be taken following successful completion of Political Science 497A.

## POL S 498. Internship in National Politics (6-12)

Prerequisite: Consent of instructor.
Students will be assigned to political agencies in Washington, D.C., such as congressional staffs, interest groups, executive agencies, legal/judicial offices and political party committees. For information on internship opportunities, especially state politics, refer to the internship section on the department website. Maximum credit six units applicable to the major in political science; maximum credit three units applicable to the minor in political science.

## POL S 499. Special Study (1-3)

Prerequisites: Twelve upper division units in political science and consent of the instructor.

Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
POL S 516. Statistics for Political Scientists (3)
Prerequisite: Political Science 201.
Does not fulfill undergraduate capstone major requirement. Basic concepts, theories, and methods that are utilized by political and other social scientists using statistics and microcomputers. Intermediate level introduction to statistical methods in political science.

## POL S 596. Topics in Political Science (1-3)

Prerequisites: Upper division or graduate standing.
Selected topics in political science. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Maximum credit of six units of 596. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.

# Portuguese 

In the College of Arts and Letters

OFFICE: Arts and Letters 134
TELEPHONE: 619-594-6588 / FAX: 619-594-5293
Faculty
Emeritus: Blanco
Chair: Blanco
Associate Professor: Vasconcelos
Offered by the Department of Spanish and Portuguese Languages and Literatures
Minor in Portuguese and Brazilian studies.
Offered by the Department of European Studies
Major in European studies, with emphasis in Portuguese.
Offered by International Business
Major in international business, with emphasis in Portuguese.

## Portuguese and Brazilian Studies Minor

(Minor Code: 11079) (SIMS Code: 115702)
The minor in Portuguese and Brazilian studies consists of a minimum of 15 units, nine of which must be approved upper division courses taught in Portuguese. Any course taught in English needs department approval to apply to the minor requirements.

The following courses are acceptable for the Portuguese and Brazilian studies minor: Portuguese 101, 102, 110, 203, 204, 299, 306 [or Latin American Studies 306], 307 [or Latin American Studies 307], 311, 312, 443, 499, 530, 535, 540.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Language Requirement for the B.A. Degree in Liberal Arts and Sciences

Students electing the study of Portuguese to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Portuguese 203 or the equivalent level of achievement. Refer to section of catalog on "Graduation Requirements" for additional ways to satisfy competency.

## High School Equivalents

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:

1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

## Courses (PORT)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

Native speakers of Portuguese will not receive credit for taking lower division courses in Portuguese except with advance approval from the department.

All lower division courses in Portuguese are taught in Portuguese.

No credit will be given for lower division courses taken after successfully completing any upper division Portuguese course taught in Portuguese. No credit will be given for Portuguese 101, 102, 110, 203, 204 taken out of sequence.
PORT 101. Elementary Portuguese I (5) [GE]
Five lectures and one hour of laboratory.
Introduction to grammar, listening, reading, speaking, and writing. Communicative approach to developing language skills. Not open to students with credit in Portuguese 102, 110, 203, 204, or higher-numbered Portuguese course.
PORT 102. Elementary Portuguese II (5) [GE]
Prerequisite: Portuguese 101 or two years of high school Portuguese.

Continuation of Portuguese 101. Practices of grammar, listening, reading, speaking, and writing. Adoption of a communicative approach to develop intermediate-low level skills in Portuguese. Not open to students with credit in Portuguese 110, 203, 204, or a higher-numbered Portuguese course. (Formerly numbered Portuguese 201.)
PORT 110. Beginner Portuguese for Spanish Speakers (3) [GE]
Accelerated beginner course for Spanish speakers. Essentials of grammar, listening, reading, speaking, and writing. Adoption of a communicative approach to develop intermediate-low level skills in Portuguese. Contrasts with Spanish and other Romance Ianguages. Not open to students with credit in Portuguese 102, 203, 204, or a higher-numbered Portuguese course.
PORT 203. Intermediate Portuguese I (3) [GE]
Prerequisite: Portuguese 102 or 110 or completion of the third year of high school Portuguese.

Continuation of first-year Portuguese. Practices of grammar, listening, reading, speaking, and writing. Adoption of a communicative approach to develop intermediate-mid level skills in Portuguese. Not open to students with credit in Portuguese 204 or a higher-numbered Portuguese course. (Formerly numbered Portuguese 301.)
PORT 204. Intermediate Portuguese II (3) [GE]
Prerequisite: Portuguese 203 or completion of the fourth year of high school Portuguese.

Continuation of second-year Portuguese. Practices of grammar, listening, reading, speaking, and writing. Adoption of a communicative approach to develop intermediate-high level skills in Portuguese. Not open to students with credit in Portuguese 311 or a high-er-numbered Portuguese course. (Formerly numbered Portuguese 401.)

## PORT 250. Women's Literature in the Portuguese-speaking

 World (3) [GE]Prerequisite: Completion of the General Education requirement in Communication and Critical Thinking I.2., Written Communication.

Women authors of the Portuguese-speaking world and their relationship to the cultural, historical, literary, and sociopolitical questions raised by their texts. Taught in English.

## PORT 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

PORT 299. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
All upper division courses in Portuguese are taught in Portuguese unless otherwise stated.

No credit will be given for lower division courses taken after successfully completing any upper division Portuguese course taught in Portuguese.
PORT 306. Portuguese and Brazilian Cinema and Culture (3) [GE] (Same course as Latin American Studies 306)
Main movements and productions of Portuguese and Brazilian cinema. Social factors and representations of national identities. Taught in English.

## PORT 307. Brazilian Music and Culture (3) [GE]

(Same course as Latin American Studies 307)
Prerequisite: Upper division standing.
Brazilian music and culture with emphasis on religious and cultural practices of candomble, capoeira, carnival, and notions of race and class in contemporary Brazilian funk and hip-hop. Taught in English.

## PORT 311. Advanced Reading, Writing, and Grammar (3)

Prerequisite: Portuguese 204.
Developing advanced proficiencies in grammar, reading, and writing, based on models from modern Luso-Brazilian literary and non-literary texts.

## PORT 312. Advanced Listening and Conversation (3)

Prerequisite: Portuguese 204.
Developing advanced proficiencies in listening and speaking activities, based on Luso-Brazilian audiovisual and multimedia sources. May be taken concurrently or prior to Portuguese 311.

## PORT 443. Contemporary Luso-Brazilian Civilization (3)

Prerequisite: Portuguese 204.
Historical, cultural socioeconomic, ethnic, geographic, and political factors of modern Brazil and Portugal.
PORT 496. Selected Studies in Portuguese (3)
Topics in Lusophone language, literature, culture, and linguistics. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Maximum credit six units.

## PORT 499. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
PORT 530. Portuguese Literature (3)
Prerequisite: Portuguese 311 or 312.
Foremost authors, movements, and works in the literature of Portugal.
PORT 535. Brazilian Literature (3)
Prerequisite: Portuguese 204.
Important movements, authors, and works of the literature of Brazil from the colonial period to modern times.

## PORT 540. Luso-Brazilian Literature (3)

Prerequisite: Portuguese 311 or 312.
Portuguese and Brazilian literary genres, movements, and texts of historical and modern aesthetics discussed from a transatlantic perspective.

# Professional Studies and Fine Arts 

## Offered by the College of Professional Studies and Fine Arts

OFFICE: Professional Studies and Fine Arts 212
TELEPHONE: 619-594-5124 / FAX: 619-594-4987

## Faculty

Faculty assigned to teach Professional Studies and Fine Arts courses are drawn from the Schools of Art and Design, Communication, Hospitality and Tourism Management, Journalism and Media Studies, Music and Dance, Public Affairs, and Theatre, Television, and Film.

## Professional Studies and Fine Arts International Studies Minor

 (Minor Code: 22997) (SIMS Code: 669000)The minor consists of 18 units to include 12 upper division units from Professional Studies and Fine Arts 320 or 350, 501, 502, 550; and six units selected from Professional Studies and Fine Arts 100, Art 357, Communication 371, Criminal Justice 570*, Dance 382, Journalism and Media Studies 210, 450*, Music 345, Public Administration 580*, Recreation and Tourism Management 404, and Television, Film and New Media 363 (maximum credit three units).

Courses in the major department or that are required for the major may not be used to satisfy requirements for the minor. A minimum of six upper division units must be completed in residence at San Diego State University.

For more information, see http://psfa.sdsu.edu/international_minor.

> *Additional prerequisites required.

## Pop Culture Certificate

Refer to "Arts and Letters" in this section of the catalog.

## Courses (PSFA)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

PSFA 100. Sustainable Self-Development (3) [GE]
Applications, definitions, key concepts, measures, and theories of sustainable development of individuals and society. Establishment of effective and potentially fulfilling sustainability lifestyle plan for the future. Interrelationships between biodiversity and society.
PSFA 280. Adaptation to U.S. Academic Culture (3)
Cross-cultural adaptation of international students to include interactions with American students and theories of intercultural communication.

## PSFA 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
PSFA 320. Creativity and Communication in the Arts (3) [GE]
Common elements shared by various artistic forms from an international perspective. Focus on creativity and communication as exemplified in subject, form, function, medium, organization, and style. Attendance at dance, drama, film, music, television, and visual art events required.

## PSFA 350. International Studies (3)

Awareness of international surroundings and creation of global citizens in PSFA disciplines. Concepts of culture and self-awareness, dimensions of culture, theoretical perspectives, behavioral patterns, and applications in PSFA disciplines.

PSFA 381. Cross-Cultural Interpretations of Gambling Addiction (3) [GE]
Prerequisite: Upper division standing.
Cross-cultural applications of scientific knowledge about gambling addiction and disordered gambling. Social and historic place of gambling in government revenue generation and political consequences of particular public policy actions.

## PSFA 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## PSFA 499. Special Study (1-3)

Prerequisite: Professional Studies and Fine Arts 350.
Individual directed study on topics within context of PSFA international studies minor. Maximum credit six units.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

## PSFA 501. Study Abroad I (3)

Prerequisite: Professional Studies and Fine Arts 320 or 350.
Study and practical applications of PSFA-related intercultural issues in a selected international setting. Areas of study within PSFA disciplines. Maximum credit six units.

## PSFA 502. Study Abroad II (3)

Prerequisite: Professional Studies and Fine Arts 320 or 350.
Study and practical applications of PSFA-related intercultural issues in a selected international setting. Areas of study within PSFA disciplines. Maximum credit six units.

## PSFA 550. International Studies Capstone (3)

Prerequisites: Professional Studies and Fine Arts 501 and 502.
Comparative exploration of the ways visited culture/society/ nation addresses a problem or issue relative to approaches taken in US.

# Psychology 

OFFICE: Life Sciences 110
TELEPHONE: 619-594-5358
UNDERGRADUATE ADVISING OFFICE: Life Sciences 105
TELEPHONE: 619-594-5412 / FAX: 619-594-1332
WEBSITE: http://www.psychology.sdsu.edu

## Faculty

Emeritus: Borges, Bryson, Defran, Dunn (SDSU-IV), Fenson, Franzini, Graham, Graf, Hillix, Hornbeck, Kass, Klonoff, Leckart, Lee, Litrownik, Marlin, Marshall, Martin, McCordick, McGivern,
Plotnik, Price (Judy), Psomas, Reed, Reilly, Riley, Rodin, Saccuzzo,
Sallis, Sattler, Schulte, Scollay, Spinetta
Chair: Gilbert
Professors: Amir, Atkins, Castañeda (SDSU-IV), Cronan, Devos, Friend, Gallo, Gilbert, Hattrup, Holcomb, Malcarne, Matt, Mattson Weller, Müller, Murphy, Price (Joseph), Prislin, Roesch,
Sereno, Talavera, Thomas, Twenge, Weersing
Associate Professors: Blashill, Brasser, Conte, Cordero (SDSU-IV), Horvath, Kath, Marinkovic, Marx, Sadler, Thoman, Vaughn, Wells, Yeh
Assistant Professors: Abarbanell (SDSU-IV), Barber, Helm, Kappenman, Villodas, Wiggins
Lecturers: Laumakis, Turner

## Offered by the Department

Doctor of Philosophy degree in clinical psychology.
Master of Arts degree in psychology.
Master of Science degree in psychology.
Major in psychology with the B.A. degree
in applied arts and sciences.
Major in psychology with the B.A. degree
in liberal arts and sciences.
Emphasis in industrial and organizational psychology.
Minor in psychology.
Certificate in industrial/organizational psychology.

## The Major

What is psychology? Psychology is the scientific discipline that studies human behavior and mental processes: how human beings develop, learn, think and feel. Psychologists study the relative influences of heredity and experience throughout the life span in a wide variety of environments, including the laboratory, home, school, workplace, jury room, hospital and hospice. Faculty of the Department of Psychology at SDSU focus on a number of areas of psychology. Among these are:

- the effects of prenatal environments, including the influence of hormones and drugs on brain development and later functioning,
- the effects of childhood experience on social-emotional and cognitive development,
- the functioning of adults and the elderly in response to biological and environmental challenges,
- the normal processes of learning, memory and cognition,
- the effectiveness of behavioral and cognitive intervention procedures for enhancing physical and mental well-being.
What do psychology graduates do? The majority of students who graduate with a B.A. in psychology enter the job market and find employment in a broad range of settings, including business, state and local government agencies, and health-care services. Because the B.A. in psychology provides a liberal arts education as opposed to technical training, psychology majors will need to acquire job-specific experience or expect additional on-the-job training.

Does the B.A. in psychology prepare students for graduate work in applied areas? Students who have maintained strong academic records in psychology often enter masters degree programs in counseling: Clinical Social Work; Marriage, Family and Child Counseling; and School Psychology. Others pursue graduate work in a number of related fields including Program Evaluation,

Industrial and Organizational Psychology, Public Health, Social Ecology, Education, Criminal Justice, Law, Administrative Social Work, Human Resource Development, and Medicine.

What is the Ph.D. in psychology? Graduate work which leads to the Ph.D. trains one to be a scientific psychologist, to study human behavior and mental processes, and to teach at the university level. The Ph.D. in clinical psychology also includes supervised training in clinical practice. The time commitment for earning a Ph.D. degree is considerable, and these programs are highly competitive. Only a small percentage of psychology graduates will in fact go on to earn the Ph.D. in psychology.

## Impacted Program

The psychology major is an impacted program. To be admitted to the psychology major, students must meet the following criteria:
a. Complete with a grade of C (2.0) or better: Psychology 101, 201, 211, 230, 260, 280, and Biology 100 (or Biology 203). With the exception of Psychology 201, these courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). The minimum grade in each class is C (2.0) or better. NOTE: Psychology majors may use Psychology 280 to satisfy Mathematics/ Quantitative Reasoning General Education requirement. Note Also: A college level statistics course will be accepted from another department (Civil Engineering 160; Economics 201; Linguistics 270; Political Science 201; Sociology 201; Statistics 119 or 250) combined with Psychology 281 in lieu of Psychology 280. Psychology 280 must be completed with a grade of $B(3.0)$ or better for students in the emphasis in industrial and organizational psychology;
b. Have a cumulative GPA of 2.50 or better.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Advising

All students planning to major in psychology are urged to visit the Psychology Undergraduate Advising Office (Life Sciences 105). Students should meet with a psychology adviser at least once per semester to ensure they are on track to graduate. The Advising Office is open year-round and may be contacted at 619-594-5412, psychology.advising.sdsu@sdsu.edu.

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Psychology Major

With the B.A. Degree in Applied Arts and Sciences
(Open only to AA-T/TMC)

## (Major Code: 20011) (SIMS Code: 778307)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

The Applied Arts and Sciences degree is open only to students who have completed the California Community College Associate in Arts in Psychology for Transfer (AA-T) degree completing the Transfer Model Curriculum (TMC) for Psychology.

A minor is not required for this major. However, depending on career goals, students may wish to consider minors in areas such as biology, business, public administration, recreation, social work, statistics, and others.

Preparation for the Major. Psychology 101, 201, 211, 230, 260, 280, and Biology 100 (or Biology 203). (20 units) With the exception of Psychology 201, these prerequisite courses may not be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). The minimum grade in each class is C (2.0) or better. NOTE: Psychology majors may use Psychology

280 to satisfy Mathematics/Quantitative Reasoning General Education requirement. NOTE ALSO: A college level statistics course will be accepted from another department (Civil Engineering 160; Economics 201; Linguistics 270; Political Science 201; Sociology 201; Statistics 119 or 250) combined with Psychology 281 in lieu of Psychology 280.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of $C(2.0)$ or better. See "Graduation Requirements" section for a complete listing of requirements.

Requirements for the Major. A minimum of 31 upper division units in psychology to include courses that meet the methods requirement and the breadth requirement.

Methods. All majors must complete Psychology 301 or 410 or both. Psychology 301 is suitable for most psychology majors, including those planning to enter the job market after graduation, those undecided about career plans, and those planning to pursue graduate work in related fields such as counseling.

Students planning to pursue graduate work in psychology (research degrees) should take Psychology 370 and 410 as early as possible. NOTE: Students enrolling in these courses must have earned a grade of $B$ (3.0) or better in Psychology 280 or its equivalent. Students unsure of their statistical or computer competence may wish to take Psychology 301 before enrolling in Psychology 370 or 410.

Breadth. All majors must complete four courses or 12 units; one course selected from each of the following groups:
Group I. Psychology 340 or 344.
Group II. Psychology 319, 351, or 370.
Group III. Psychology 331, 332, 333, 350, or 407.
Group IV. Psychology 360, 361, 362, 380, or 388.
An additional 14-15 elective units selected from 300- to 500level psychology courses to satisfy the 31 units required for the psychology major.

## Psychology Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 20011) (SIMS Code: 778301)
All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 56 units in psychology courses can apply to the Liberal Arts and Sciences degree.

A minor is not required for this major. However, depending on career goals, students may wish to consider minors in areas such as biology, business, public administration, recreation, social work, statistics, and others.

Preparation for the Major. Psychology 101, 201, 211, 230, 260, 280, and Biology 100 (or Biology 203). (20 units) With the exception of Psychology 201, these prerequisite courses may not be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). The minimum grade in each class is C (2.0) or better. NOTE: Psychology majors may use Psychology 280 to satisfy Mathematics/Quantitative Reasoning General Education requirement. NOTE ALSO: A college level statistics course will be accepted from another department (Civil Engineering 160; Economics 201; Linguistics 270; Political Science 201; Sociology 201; Statistics 119 or 250) combined with Psychology 281 in lieu of Psychology 280.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Requirements for the Major. A minimum of 31 upper division units in psychology to include courses that meet the methods requirement and the breadth requirement.

Methods. All majors must complete Psychology 301 or 410 or both. Psychology 301 is suitable for most psychology majors,
including those planning to enter the job market after graduation, those undecided about career plans, and those planning to pursue graduate work in related fields such as counseling.

Students planning to pursue graduate work in psychology (research degrees) should take Psychology 370 and 410 as early as possible. NOTE: Students enrolling in these courses must have earned a grade of $B(3.0)$ or better in Psychology 280 or its equivalent. Students unsure of their statistical or computer competence may wish to take Psychology 301 before enrolling in Psychology 370 or 410.

Breadth. All majors must complete four courses or 12 units; one course selected from each of the following groups:
Group I. Psychology 340 or 344.
Group II. Psychology 319, 351, or 370.
Group III. Psychology 331, 332, 333, 350, or 407.
Group IV. Psychology 360, 361, 362, 380, or 388.
An additional 14-15 elective units selected from 300- to 500level psychology courses to satisfy the 31 units required for the psychology major.

## Emphasis in Industrial and Organizational Psychology

## (SIMS Code: 778312)

This emphasis offers students an opportunity to complete a four-course sequence (within the scope of a bachelor's degree in psychology) that will facilitate students' competitiveness in the job market and admission to graduate programs in industrial and organizational (I/O) psychology or related fields. Students will learn about theories, research, and practice in industrial and organizational psychology. Advanced courses will provide students with opportunities to complete applied projects and written assignments.

A minor is not required for this major. However, depending on career goals, students may wish to consider minors in areas such as biology, business, public administration, recreation, social work, statistics, and others.

Preparation for the Major. Psychology 101, 201, 211, 230, 260, 280, and Biology 100 (or Biology 203). (20 units) With the exception of Psychology 201, these prerequisite courses may not be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). The minimum grade in each class is $C$ (2.0) or better, except for Psychology 280 which requires a grade of B (3.0) or better. NOTE: Psychology majors may use Psychology 280 to satisfy Mathematics/Quantitative Reasoning General Education requirement. NOTE ALSO: A college level statistics course will be accepted from another department (Civil Engineering 160; Economics 201; Linguistics 270; Political Science 201; Sociology 201; Statistics 119 or 250) combined with Psychology 281 in lieu of Psychology 280.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Requirements for the Major. A minimum of 31 upper division units in psychology to include Psychology 301 or 410 and 12 units to include Psychology 319, 320, 321, and 370.

Methods. All majors must complete Psychology 301 or 410 or both. Psychology 301 is suitable for most psychology majors, including those planning to enter the job market after graduation, those undecided about career plans, and those planning to pursue graduate work in related fields such as counseling.

Students planning to pursue graduate work in psychology (research degrees) should take Psychology 370 and 410 as early as possible.

NOTE: Students enrolling in these courses must have earned a grade of $B(3.0)$ or better in Psychology 280 or its equivalent. Students unsure of their statistical or computer competence may wish to take Psychology 301 before enrolling in Psychology 370 or 410.

Breadth. All majors must complete three courses or nine units; one course selected from groups I, III, and IV:
Group I. Psychology 340 or 344.
Group II. Satisfied by emphasis core courses.
Group III. Psychology 331, 332, 333, 350, or 407.
Group IV. Psychology 360, 361, 362, 380, or 388.
An additional 5-6 elective units selected from 300- to 500level psychology courses to satisfy the 31 units required for the psychology major.

## Recommendations for Psychology Electives

Employment with the B.A. Electives should be selected in accord with general career goals. Students interested in health and human services may take courses that focus on psychological health and well-being or issues related to child development. Those interested in business may take courses that focus on industrial, organizational and consumer issues or that emphasize computer skills, measurement, data analysis, or some combination of these.

Masters programs in counseling. At SDSU, a Master of Science degree in Counseling is offered by the College of Education and a Master of Social Work degree is offered by the College of Health and Human Services. For these programs students have considerable latitude in the selection of psychology electives, but it is important to develop an appropriate profile of volunteer or work experience.

Graduate programs in psychology. Most masters or doctoral programs in psychology require students to have strong research profiles. SDSU psychology majors can accomplish this by completing Psychology 370, 410, and becoming involved as early as possible in faculty-sponsored research.

## Psychology Minor

The minor in psychology consists of 19-21 units selected from one of the following areas:
Cognitive and Behavioral Neuroscience (SIMS Code: 778334): Psychology 101, 260, and Biology 100; 12 units of upper division psychology courses selected from Psychology 360, $361,362,365,380$, and 388 . (21 units)
Industrial/Organizational (SIMS Code: 778336): Psychology 101 and 280 or equivalent, and Psychology 319, 320, 321, 340. (19 units)

Personality and Social (SIMS Code: 778360): Psychology 101, 230 and 211 or $260^{*}$; 12 units of upper division psychology courses of which nine must be selected from Psychology 331 or 332 or 333, 340, 350 and 351. (21 units)

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.
*Additional prerequisites required.

## Industrial/Organizational (I/O) Psychology Certificate

## (Offered only through SDSU Global Campus)

## (SIMS Code: 778381)

Industrial/organizational (I/O) psychology is the scientific study of the workplace. Using psychological theory and methodology, I/O psychologists contribute to evidence based practice designed to improve understanding and management of human resources and organizational behavior. The certificate offers non-degree seeking students a rigorous introduction to theories, methods, and practice of I/O psychology; and how to apply theories and methods of psychology to issues of critical relevance to organizations to include:

1. Recruitment, assessment, and personnel selection;
2. Training needs assessment and design;
3. Performance measurement and talent management;
4. Coaching and individual development;
5. Organizational development and change management;
6. Employee satisfaction, morale, and work-life balance;
7. Leadership and motivation.

## Admission Requirements

To be admitted to the certificate program, students must have earned a high school diploma or equivalent and must demonstrate by previous coursework and/or work experience evidence of potential for completing the academic program. Previous courses in psychology taken at SDSU or at other universities will be considered for credit toward certification on an individual basis, but not to exceed seven units.

The Department of Psychology is responsible for the coordination of the certificate program in conjunction with SDSU Global Campus. Applications may be submitted prior to entering the program or before the completion of nine semester units of coursework.
Students are required to submit an Open University Registration Form each semester to SDSU Global Campus.
Students accepted into the program will be assigned an adviser by the Department of Psychology.

## Certificate Requirements

Complete 16 semester units of coursework to include Psychology 101, 280, 319, 320, 321. Students may transfer up to seven units earned in Psychology 101 or 280. PSY 319, 320, and 321 must be completed at San Diego State University.
Achieve a cumulative grade point average of 2.5 or better. Each course must be completed with a grade of C (2.0) or better.
Psychology 101 must be completed before taking Psychology 319, 320, 321.

Complete coursework within four years after admission to the program.

Petition SDSU Global Campus for the certificate upon completion of 16 semester units.

## Courses (PSY)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

NOTE: Many psychology courses have enforced prerequisites, meaning the student must provide proof of having completed the prerequisite to the instructor in order to remain enrolled. Students who have not completed an enforced prerequisite and who fail to drop the class officially will be assigned the grade of "WU," which is equivalent to an "F." Before enrolling in psychology courses, students should consult the catalog to determine that they have completed any enforced prerequisites.

## LOWER DIVISION COURSES

## PSY 101. Introductory Psychology (3) [GE]

Facts, principles, and concepts which are basic to understanding human behavior.

## PSY 117. Health, Happiness, and Academic/Professional

 Success (3) [GE]Evidenced-based skills to help in multiple areas of life on and off campus to include academics, mental and physical health, social connections and relationships.
PSY 201. Academic and Career Opportunities in Psychology (1) Cr/NC
Prerequisites: Psychology 101 and completion of 30 units.
Information about careers in psychology. Includes identification of career-related strengths and interests and information on post-baccalaureate options in psychology and related fields. Introduction to resources in Psychology Undergraduate Advising and Career Services.

## PSY 211. Introduction to Cognitive Psychology (3)

Prerequisite: Psychology 101.
Basic principles and research in animal and human cognition.
PSY 230. Developmental Psychology (3)
Prerequisite: Psychology 101. Proof of completion of prerequisite required: Copy of transcript.

Psychological development of normal individual from conception through childhood, adolescence, and maturity. Emphasis on interdependence of various periods of the individual's life. Not open to students with credit in Child and Family Development 270.
PSY 260. Introduction to Physiological Psychology (3)
Prerequisites: Psychology 101 and Biology 100. Proof of completion of prerequisites required: Copy of transcript.

Elementary physiology of the nervous system. Physiological mechanisms underlying the psychological phenomena of sensation, perception, emotion, arousal, motivation, learning and memory, and cortical specialization.
PSY 280. Statistical Methods in Psychology (4) [GE]
Three lectures and two hours of laboratory.
Prerequisite: Psychology 101. Proof of completion of prerequisite required: Copy of transcript.

Quantitative methods in psychology for producing, analyzing, and interpreting data. Sampling, basic research designs, describing distributions, correlation, regression, applications of normal probability curve, confidence intervals, and tests of significance. Analysis and interpretation of data using statistical, spreadsheet, and word processing software. Students with credit or concurrent registration in the following lower division statistics courses will be awarded a total of four units for the two (or more) courses: Psychology 280; Administration, Rehabilitation and Postsecondary Education 201; Biology 215; Civil Engineering 160; Economics 201; Linguistics 270; Political Science 201; Sociology 201; Statistics 119 and 250.

## PSY 280X. Statistical Methods in Psychology Support (1) $\mathrm{Cr} / \mathrm{NC}$

 Three hours of activity.Prerequisites: Psychology 101 and concurrent registration in Psychology 280. Required for students who have not satisfied the SDSU Mathematics/Quantitative Reasoning Assessment requirement.

Required support course for Psychology 280. Credit in this course satisfies the SDSU Mathematics/Quantitative Reasoning Assessment requirement.

## PSY 281. Data Analysis in Psychology (2)

One lecture and two hours of laboratory in computer laboratory.
Prerequisite: Credit in a three-unit statistics course without a computer laboratory component. Proof of completion of prerequisite required: Copy of transcript.

Statistical and graphic analysis and interpretation of psychological data using computer technology. Activities involve statistical, spreadsheet, and word processing software. Not open to students with credit in Psychology 280.
PSY 296. Experimental Topics (1-3)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
PSY 301. Introduction to Research Methods in Psychology (4)
Three lectures and two hours of laboratory.
Prerequisites: Completion of the Graduation Writing Assessment Requirement or the eligibility to enroll in an upper division writing course. Psychology 101 and 280. Proof of completion of prerequisites required: Copy of transcript. Open only to psychology majors.

Methods used to answer questions in psychology, including case study, observation, survey, experimental, and field study procedures. Class projects using these methods, interpreting results and report writing; critically evaluating research findings.
PSY 316. Behavior Modification (3)
(Offered only at SDSU-IV)
Prerequisite: Psychology 101. Recommended: Psychology 211.
Contingencies of reinforcement, stimulus control, response shaping, aversive control, and other basic principles of operant behavior applied to understanding and modification of human behavior.

## PSY 319. Industrial and Organizational Psychology (3)

Prerequisite: Psychology 101. Proof of completion of prerequisite required: Copy of transcript.

Broad-based survey of various content areas of industrial (e.g. selection, appraisal) and organizational (e.g. motivation, leadership) psychology. Underlying psychological principles that influence human behavior in the workplace. Not open to students with credit in Psychology 320 or 321.
PSY 320. Personnel and Industrial Psychology (3)
Prerequisite: Psychology 319. Proof of completion of prerequisite required: Copy of transcript.

Psychological principles applied to industrial problems of selection, placement and training.

## PSY 321. Organizational Psychology (3)

Prerequisite: Psychology 319. Proof of completion of prerequisite required: Copy of transcript.

Human behavior in context of organizational life. Factors related to effectiveness of individuals and groups within organizations, including organization design, leadership and control, motivation, cooperation, and conflict.

## PSY 331. Psychology of Infant and Child Development (3)

Prerequisites: Psychology 101 and 230 . Students enrolling in this course must have earned a grade of $C$ (2.0) or better in Psychology 230. Proof of completion of prerequisite required for Psychology 230: Copy of transcript.

Psychological development of normal child from infancy through childhood focusing on physical, social, cognitive, and linguistic aspects of development.

## PSY 332. Psychology of Adolescent and Early Adult

Development (3)
Prerequisites: Psychology 101 and 230. Students enrolling in this course must have earned a grade of C (2.0) or better in Psychology 230. Proof of completion of prerequisite required for Psychology 230: Copy of transcript.

Psychological development of normal individual from adolescence through early adulthood focusing on physical, social, and cognitive aspects of development.

## PSY 333. Developmental Psychopathology (3)

Prerequisites: Psychology 101 and 230. Students enrolling in this course must have earned a grade of $C$ (2.0) or better in Psychology 230. Proof of completion of prerequisite required for Psychology 230: Copy of transcript.

Cognitive, affective, and social aspects of abnormal development from childhood through adolescence. Consideration, within a developmental framework, of etiological theories and factors, problem expression and treatment issues.
PSY 340. Social Psychology (3) [GE]
Prerequisite: Psychology 101.
Major problems and findings concerning group behavior and group membership, the socialization of the individual, and processes of social interaction.

## PSY 344. Psychology and Culture (3)

Prerequisite: Psychology 101.
Impact of culture in each of psychology's major areas, theories, and empirical findings.
PSY 345. Chicana and Chicano Psychology (3)
Prerequisite: Psychology 101.
Evolution of psychology of Chicanos with emphasis on understanding underlying roots and foundations. Empirical research conducted with Chicanos in areas of psychology, psychiatry, and mental health.

## PSY 350. Abnormal Psychology (3)

Prerequisite: Psychology 101.
Causes and treatment of abnormal behavior with emphasis on major behavior disorders.
PSY 351. Psychology of Personality (3) [GE]
Prerequisite: Psychology 101.
Major theoretical approaches to individual differences and the study of the person. Techniques of personality assessment. Selected research findings.

## PSY 353. Stress, Trauma, and the Psychological Experience of

 Combat (3)Prerequisite: Psychology 101.
Physiology, psychological experience, historical context, and measurement of stress, to include family and workplace stress, large scale traumatic events and disasters, combat and war. Coping with stress, loss, emotional wounds, and bereavement. Treatment, diagnosis, and potential for personal growth.
PSY 355. Psychology of Human Sexual Behavior (3)
Prerequisite: Psychology 101.
Evaluation of behavioral and physiological data of normal, aberrant, and dysfunctional human sexual behavior, including description of available treatment methods.

## PSY 356. Forensic Psychology (3)

Prerequisite: Psychology 350.
How psychological research and theory informs legal processes. Behavioral analysis, criminal investigation, eyewitness identification, jury selection, juvenile forensics and death penalty cases, mental competencies, police work, school bullying, sexual abuse issues, and threat assessment.

## PSY 360. Behavioral Neuroscience (3)

Prerequisites: Psychology 101 and 260. Proof of completion of prerequisites required: Copy of transcript.

Biological and physiological underpinnings of behavior: genetics, hormones, transmitters, plasticity/regeneration, development, and metabolism/nutrition. Analysis of their role in normal behavior, psychopathology, neurological disorders, and treatment of behavioral disturbances.

## PSY 361. Neuropsychology (3)

Prerequisites: Psychology 101 and 260. Proof of completion of prerequisites required: Copy of transcript.

Characterization of human brain-behavior relationships derived from neuropsychometric studies of healthy, neuropsychiatric and brain damaged populations. Emphasis on functional neuroanatomy and the effects of abnormal brain development and disease on processes such as cognition, memory, language, visual-spatial, and other functions.

## PSY 362. Cognitive Neuroscience (3)

Prerequisites: Psychology 101 and 260. Proof of completion of prerequisites required: Copy of transcript.

Functional organization of the human brain, including sensorimotor and cognitive systems and their functional interactions; development and evolution; normal and pathological plasticity. Approaches applied to healthy human brain, such as neuroimaging and event-related potentials.

## PSY 365. Drugs and Behavior (3)

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A.2. Life Sciences.

Fundamentals of regulation, administration, tolerance, dependence, and physiological activity of drugs. Effects of stimulants, depressants, opiates, psychedelics, and psychotherapeutic drugs on the nervous system and on cognitive, personality, and behavioral functioning.

## PSY 370. Psychological Testing and Measurement (3)

Prerequisites: Psychology 280 or equivalent statistics course with a grade of B(3.0) or better; Psychology 301 with a grade of B (3.0) or better. Proof of completion of prerequisites required: Copy of transcript. NOTE: Students electing to take Psychology 410 for the methods requirement may petition waiver of the Psychology 301 prerequisite by permission of the undergraduate adviser. Open only to psychology majors.

Measurement theory and the basic principles of testing. Selection, construction and critical evaluation of group tests of intelligence, personality, aptitude, interest and achievement.

## PSY 380. Intermediate Cognitive Psychology (3)

Prerequisite: Psychology 101. Recommended: Psychology 211.
Research and theory on attention, language, learning, memory, thinking, and understanding.
PSY 388. Sensation and Perception (3)
Prerequisites: Psychology 101 and 260.
Theory and research in sensory and perceptual processes.
PSY 407. Health Psychology (3)
Prerequisites: Psychology 211 and 280. Proof of completion of prerequisites required: Copy of transcript.

Behavioral components of major illnesses and causes of death and disability. Primary prevention of health problems through behavior change and psychological features of the health care system.

## PSY 410. Advanced Research Methods Laboratory (5)

Two lectures and six hours of activity.
Prerequisites: Completion of the Graduation Writing Assessment Requirement or the eligibility to enroll in an upper division writing course. Psychology 211; Psychology 280 or equivalent statistics course with a grade of $B(3.0)$ or better. Proof of completion of prerequisites required: Copy of transcript. Open only to psychology majors.

Use of research design, quantitative methods, and research reports as applied to all areas of psychology.
PSY 442. Prejudice and Stereotypes (3)
Prerequisite: Psychology 340. Proof of completion of prerequisite required: Copy of transcript.

Classic and contemporary theories and research on prejudice and stereotyping to include origin and forms of phenomena, consequences, and approaches aimed at reducing them.

## PSY 452. Introduction to Counseling and Therapy (3)

Prerequisite: Psychology 350 or 351 . Proof of completion of prerequisite required: Copy of transcript.

Theory, methods, and research in psychological approaches to personality and behavior change.
PSY 470. Intermediate Statistics for Psychological Research (3)
Prerequisite: Consent of instructor.
Theoretical foundations of statistics including probability theory, distribution theory, and statistical inference. Model-based statistical comparisons. Application of statistical theory to psychological research questions.

## PSY 491. Academic or Psychological Counseling

Experiences (3) $\mathrm{Cr} / \mathrm{NC}$
Prerequisites: Upper division psychology major with a 3.0 minimum grade point average and consent of psychology undergraduate coordinator.

Individual supervision of academic or psychological counseling experiences, geared to acquisition of counseling and communication skills. May be repeated with approval of psychology undergraduate coordinator. Maximum credit six units. No more than nine units of Psychology 491, 494, 495 may be counted toward the major and no more than 12 units of courses numbered Psychology 491, 494, 495, 497, 499 may be counted toward the major.
PSY 492. Responsible Conduct in Scientific Research (1) $\mathrm{Cr} / \mathrm{NC}$ Prerequisite: At least one introductory level science course.
Responsible conduct in scientific research. Topics include conflict of interest, plagiarism, reporting of scientific results, authorship, responsible use and care of animals, responsible use of human subjects.
PSY 494. Special Study: Techniques for Teaching and Tutoring in Psychology (2) Cr/NC
Prerequisite: Consent of instructor.
Practical knowledge and experience in psychology instruction and advanced content in a specific area of psychology. May be repeated with new content. Maximum credit four units. No more than nine units of Psychology 491, 494, 495 may be counted toward the major and no more than 12 units of courses numbered Psychology 491, 494, 495, 497, 499 may be counted toward the major.

## PSY 495. Field Placement in Psychology (3) Cr/NC

Prerequisites: Psychology 350 and three units from Psychology 230, 340, or 351. Proof of completion of prerequisites required: Copy of transcript.

Students will be assigned to various community agencies and work under joint supervision of an agency supervisor and course instructor, attend class meetings, and staff conferences. May be repeated with approval of psychology undergraduate coordinator. Maximum credit six units. No more than nine units of Psychology 491, 494, 495 may be counted toward the major and no more than 12 units of courses numbered Psychology 491, 494, 495, 497, 499 may be counted toward the major.
PSY 496. Selected Topics in Psychology (1-4)
Prerequisite: Psychology 101.
Intensive study in specific areas of psychology. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

## PSY 497. Senior Project (1-3)

Prerequisites: Twelve units of psychology and consent of instructor.

Individual investigation and APA-style report on a research project. Maximum credit six units. No more than nine units of Psychology 497 and 499 may be counted toward the major and no more than 12 units of courses numbered Psychology 491, 494, 495, 497, 499 may be counted toward the major.
PSY 498. Undergraduate Honors Thesis (3-6)
Prerequisites: Psychology 410, 3.5 overall GPA or 3.75 GPA in major, and consent of honors coordinator.

Directed research in psychology and completion of honors thesis. Required of students graduating with a Certificate of Recognition of Psychology Honors Thesis. May be repeated for a maximum of six units.

## PSY 499. Special Study (1-3) Cr/NC

Individual study, including library or laboratory research and a written report. Maximum credit six units. No more than nine units of Psychology 497 and 499 may be counted toward the major and no more than 12 units of courses numbered Psychology 491, 494, 495, 497, 499 may be counted toward the major.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

PSY 561. Advanced Neuropsychology (3)
Prerequisite: Psychology 360 or 361 or grade of B (3.0) or better in Psychology 260.

Biological bases of neuropsychological function and dysfunction, relationships between brain structure and function, neuropsychological assessment tools.

## PSY 568. Systems Neuroscience (3)

Two lectures and two hours of activity.
Prerequisite: Psychology 360, 361, 365, or Biology 570.
Neuroanatomy and neurophysiology of the mammalian through a signals and systems lens to include auditory, cell physiology, motor and limbic systems, neural development, simple neural models, somatosensory, and visual components. Neuroimaging physics.
PSY 569. Foundations of Neuroimaging (3)
Two lectures and two hours of activity.
Prerequisite: Psychology 101.
Physical and mathematical foundations of diffusion, functional, structural, perfusion MRI, and fMRI time series analysis. Corti-cal-surface based reconstruction and data analysis. Neural basis, localization, and recording of EEG and MEG signals.

## PSY 596. Selected Topics in Psychology (1-3)

Prerequisites: Psychology 101 and consent of instructor.
Intensive study in specific areas of psychology. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.

# Public Administration 

In the College of Professional Studies and Fine Arts

OFFICE: Professional Studies and Fine Arts 100*
TELEPHONE: 619-594-6224 / FAX: 619-594-1165
A Member of the Network of Schools of Public Policy, Affairs, and Administration (NASPAA).
*PSFA office locations are subject to change due to construction. Check the website at http://psfa.sdsu.edu for current office locations.

## Faculty

Emeritus: Boostrom, Calavita, Caves, Coates, Dobbs, Gazell, Gitchoff, Henderson, Henry, Herzog, Lee, Parker, Pugh, Rea, Ryan, R., Sabath (SDSU-IV), Sparrow, Stock, Sutton, Wilson
Director: Ryan, S.
Professors: Flanigan, Kaplan, Ryan, S.
Associate Professors: Abdel-Samad, Appleyard, Chanin, Colvin, Espinosa, Mclllwain, Mobley, Nurge, Welsh
Assistant Professors: Camargo (SDSU-IV), Jancsics (SDSU-IV), Kanaan (SDSU-IV), Kim, Kras, Vann

## Offered by the School of Public Affairs

Master of City Planning degree.
Master of Public Administration degree. Concentration in city planning. Concentration in criminal justice administration.
Master of Public Administration and Master of Arts in Latin American studies degrees (concurrent program).
Master of Science degree in criminal justice and criminology. (Jointly with the College of Arts and Letters.)
Major in criminal justice with the B.S. degree in applied arts and sciences (refer to Criminal Justice).
Major in public administration with the B.A. degree in applied arts and sciences. Emphasis in city planning.
Minor in public administration.
Certificate in public administration (available at SDSU Imperial Valley only).

## The Major

In an increasingly complex world, the nation is in need of effective leadership and competence in the administration of public affairs. The growth of all levels of government and public service organizations and their increasing responsibilities in a complex society have led to the need for more capable public administrators.

The undergraduate public administration major is an interdisciplinary program. In addition to the courses taken within the department, students select additional courses in areas as diverse as economics, sociology, social welfare, political science, and psychology. Required preparatory courses for the major include classes in accountancy, economics, management information systems, political science, and statistics.

The primary purpose of the public administration major is to provide knowledge and skills for students who wish to prepare themselves for management careers in government, community agencies, private not-for-profit organizations, planning and consulting firms, and private sector organizations that work in partnership with the public sector. Career opportunities in public administration can be found throughout the public and private sectors, and the future is represented by a stable job market. The school employs a full-time internship coordinator and career adviser.

Public administration students are employed in a wide variety of administrative positions within government, the private sector, and community agencies. For example, graduating students have recently been placed with city personnel and finance departments, county operating departments, special districts, hospitals, and consulting firms.

## Impacted Program

The public administration major is an impacted program. To be admitted to the public administration major, students must meet the following criteria:
a. Complete 18 units in the following courses with a grade of C (2.0) or better: Accountancy 201; Economics 101 and 102; Management Information Systems 180; Political Science 102; and a three-unit course in elementary statistics. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Complete a minimum of 60 transferable semester units;
c. Have a cumulative GPA of 2.40 or better.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Public Administration Major

With the B.A. Degree in Applied Arts and Sciences

## (Major Code: 21021) (SIMS Code: 666901)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A minor is not required with this major.
Preparation for the Major. Public Administration 200, Accountancy 201, Economics 101 and 102, Management Information Systems 180, Political Science 102, and a three-unit course in statistics. (21 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$. The minimum grade in each class is $C$.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Public Administration 301, 310 or 312 or $315,330,340,450,460,497$ or 498, nine units of public administration electives, and six additional units selected with the approval of an adviser from the public administration faculty. Within this program, students may build an informal concentration by selecting a cluster of courses in such areas as personnel and labor relations, urban management, urban planning, public finance and budgeting, information systems, and environmental management. Interested students must seek guidance from a public administration program faculty adviser.

Master Plan. Students should follow the Master Plan Advising Guide to ensure completion of major requirements. Contact the School of Public Affairs for a copy of the guide or download at http://spa.sdsu.edu/.

## Emphasis in City Planning

(Major Code: 21021) (SIMS Code: 666919)
Preparation for the Major. Public Administration 200, Accountancy 201, Economics 101 and 102, Management Information Systems 180, Political Science 102, and a three-unit course in statistics. (21 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$. The minimum grade in each class is $C$.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Public Administration 301, 310, 320, 330, 340, 341, 350, 420, 450, 460, 497 or $498,525$.

Master Plan. Students should follow the Master Plan Advising Guide to ensure completion of major requirements. Contact the School of Public Affairs for a copy of the guide or download at http://spa.sdsu.edu/.

## Public Administration Minor <br> (SIMS Code: 666901)

The minor in public administration consists of 21 units to include Political Science 102, Public Administration 301, 310 or 312 or 315, 330, 450, and two additional public administration courses with the consent of a public administration adviser.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Public Administration Certificate

(SDSU Imperial Valley Only)
(SIMS Code: 666930)
To receive the certificate a candidate must complete an approved program of 18 units with a minimum GPA of 2.5. Up to two public administration courses taken at another institution may be included among the required courses with approval of the program adviser.

Requirements include Public Administration 301, 330; three units selected from Public Administration 340, 341, or 450; and nine units in an area of specialization selected with the approval of the adviser.

## Courses (P A)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSE

## P A 200. The Urban Scene (3)

Key issues in public administration, social policy, and city planning. Emphasis on government structure and public decision-making process, organizational behavior, effectiveness of criminal justice policies, zoning, and land use considerations.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
P A 301. Concepts and Issues in Public Administration (3)
Theory and practice of governmental administration in differing environments, role of administrators in public policy, issues facing administrators, techniques of administration.
P A 310. Management of Urban Governments (3)
Problems of local units of government in the urban environment. Organization and function of local agencies. Emphasis on California.

## PA 312. Management of State Governments (3)

Administrative and constitutional problems of state management in the American federal system. Emphasis on California.

P A 315. Management of the Federal Government (3) (Offered only at SDSU-IV)
Prerequisite: Public Administration 301.
Problems in the administration of the federal government. Leadership, specialization, unity of command, and oversight.

## P A 320. Introduction to Urban Planning (3)

Introduction to community planning: regional, county, and city. Consideration of master plan including its purposes, contents, and method of adoption.

## PA 330. Public Personnel Administration (3)

Analysis of personnel problems. Supervision and management of public employees and public organizations in an age of change.

## P A 340. Administrative Behavior (3)

Social, psychological, and behavioral theories of organization; concepts of administrative leadership; organization and the individual; emphasis on governmental organizations. Not open to students with credit in Psychology 321.
PA 341. Administrative Management (3)
Areas and problems of administrative research. Management and operations in public organizations including forecasting, resource allocation, planning and administration of programs, preparation of administrative reports. Quantitative models of managerial decision making.
P A 350. Contemporary Urban Issues (3)
Focus on urban areas and urbanism from a public policy perspective; course examines and critiques the physical, economic, social and political dimensions of contemporary American cities utilizing a multidisciplinary approach.

## PA 420. Methods of Analysis in City Planning (3)

Prerequisites: Public Administration 320 and basic statistics course.

Methods of primary data collection and analysis of secondary data sources for problem solving in city planning, techniques associated with urban design and urban development.
P A 440. Microcomputer Applications in Criminal Justice and Public Administration (3)
(Offered only at SDSU-IV)
Two lectures and three hours of laboratory.
Prerequisite: Limited to criminal justice and public administration majors.

Operation and use of microcomputer hardware and software in criminal justice. Laboratory instruction focuses on applicability of programs to criminal justice operations.
P A 450. Fiscal and Budgetary Policy (3)
Prerequisite: Public Administration 301.
Policies of fiscal administration and budgeting; political implications of the governmental budget process; revenue, debt, and treasury management; the functions of accounting and financial reporting.
PA 460. Administration and Public Policy Development (3)
Process of formulating public policy with emphasis on the role of public agencies.
PA 480. Leadership and Public Sector (3)
Prerequisite: Public Administration 301.
Leaders as energizing forces for public administration. Analysis of leadership theories and case studies.
P A 485. Planning and Public Policy in U.S.-Mexico Border Region (3)
Prerequisite: Public Administration 301.
City planning, regional, and public policy issues in the binational Mexico-U.S. border region. Policy analysis: macro/regional and micro/urban.

## PA496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.
P A 497. Investigation and Report (3)
Analysis of special topics.

P A 498. Internship in Public Administration (2-6) Cr/NC
Prerequisites: Public Administration 301, 330, 340, 450, all lower division required courses; senior standing, a " $B$ " (3.0) average in the major, and consent of instructor.

Students will be assigned to various government agencies and will work under joint supervision of agency heads and the course instructor. Participation in staff and internship conferences. Maximum credit six units.

## PA 499. Special Study (1-3)

Prerequisite: Twelve upper division units in public administration. Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

P A 501. Nonprofit Organizations and Government (3) Prerequisites: Public Administration 301 and 460.
How nonprofit organizations interact with government institutions, influence and pressure government through policy advocacy and activism, and partner with government in contracting, public service provision, and policymaking.
P A 520. Decision Making in the Urban Community (3)
Prerequisite: Public Administration 310.
Processes of decision making in the management of urban communities.

## PA 525. The U.S. City Planning Process (3)

Prerequisite: Public Administration 320 or graduate standing.
Description and critique of traditional city planning process; styles and roles of city planner; city planning values and ethics.
PA 530. Negotiation and Bargaining in the Public Service (3) Prerequisite: Public Administration 301.
Specific issues such as strategies, the effects of threat, the physical setting, use of a third-party observer and theories of advocacy. Emphasis on analyzing simulations of the bargaining process and developing effective negotiation skills.

## P A 531. Governmental Employer-Employee Relations (3)

 Prerequisite: Public Administration 330.Historical development, legal basis, and organizational implications of governmental employer-employee relations; emphasis on California local government.
P A 540. Community Mapping: Geographic Information Systems (3)
Prerequisite: Public Administration 301 with a grade of $C$ (2.0) or better.

GIS principles for purposes of community mapping and relevant policy decision-making.
PA 571. Managing Water and Energy Resources (3) (Offered only through SDSU Global Campus and at SDSU-IV)
Prerequisite: Public Administration 301.
Management and economics of water and energy resources, delivery systems, regulatory framework, and renewable resources. Contemporary water and energy management issues.
P A 580. Comparative Public Administration (3) Prerequisite: Public Administration 301.
Administrative organization and process of selected foreign and American governments. Analysis of the cultural basis of administrative systems.
P A 581. War, the State, and Governance: Global Perspectives (3)
Prerequisite: Upper division or graduate standing. Recommended: Public Administration 301 with a grade of $C$ (2.0) or better. Defense and security challenges through global perspectives. Budgetary, intelligence, leadership, logistical, military, organizational, policy, political, and strategic challenges and opportunities confronted by government via case studies.

P A 582. War, the State, and Governance: U.S. Perspectives (3)
Prerequisite: Upper division or graduate standing. Recommended: Public Administration 301 with a grade of C (2.0) or better.

Defense and security challenges through U.S. perspectives. Budgetary, intelligence, leadership, logistical, military, organizational, policy, political, and strategic factors confronted by government via case studies.

## P A 596. Experimental Topics (1-4)

Selected current topics in public administration. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Maximum credit six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

in Public Administration, City Planning, and Criminal Justice
Refer to the Graduate Bulletin.

## Public Health

In the College of Health and Human Services

OFFICE: Hardy Tower 119
TELEPHONE: 619-594-6317 / FAX: 619-594-6112
WEBSITE: http://publichealth.sdsu.edu

## Faculty

Emeritus: Brodine, Chang, de Peyster, Elder, Gersberg, Hofherr, Hovell, Koch, Lindsay, Macera, Mayer, McTaggart, Noto, Novotny, Peddecord, Seidman, Senn, Slymen, Sorochan, Williams
Director: Madanat
Undergraduate Adviser/Division Head: Emory
Professors: Arredondo, Ayala, Corliss, Finlayson, Hoh, Kiene,
Madanat, Quintana, Shaffer, Stoskopf, Valafar, Yu
Associate Professors: Alcaraz, Baek, Calzo, Chowdhury, Crespo, Oren, Reed, Wu
Assistant Professors: Lipton, Parada, Sant, Schiaffino, Thompson, Yang
Lecturer: Emory
Offered by the School of Public Health
Doctor of Philosophy degree in public health. Concentration in epidemiology. Concentration in global health. Concentration in health behavior.
Master of Public Health degree. Concentration in biometry.
Concentration in environmental health. Concentration in epidemiology. Concentration in health management and policy. Concentration in health promotion and behavioral science.
Master of Science degree in epidemiology.
Master of Science degree in public health. Concentration in environmental health sciences.
Master of Public Health and Master of Arts in
Latin American studies degrees (concurrent program).
Master of Social Work and Master of
Public Health degrees (concurrent program).
Major in public health with the B.S. degree in
applied arts and sciences.
Minor in public health.
Certificate in preventive medicine residency
(refer to the Graduate Bulletin).
Certificate in public health
(refer to the Graduate Bulletin).

## The Major

The public health major provides a broad educational opportunity and exposure of undergraduate students to the field of public health and its many disciplines. The major prepares students to develop, implement, and assess public health programs conducted in varied settings, with diverse populations and aimed at reducing threats to public health. The major prepares students for entry-level positions in a variety of settings, including government agencies, private/voluntary agencies, hospitals, clinics, and international programs. Students develop basic competencies in public health concepts, theories, and methods. Students are exposed to the disciplines of epidemiology, environmental health, occupational health, health services administration, and behavioral science. The program of study uses examples of public health problems from all of these disciplines.

## Retention Policy

The College of Health and Human Services expects that all public health majors will make reasonable academic progress towards the degree. Public health premajors who have completed major preparatory courses, earned 60 units, but have less than a 2.9 GPA may be removed from the premajor and placed in undeclared.

## Impacted Program and Standards for Admission

The public health major is an impacted program. To be admitted to the public health major, students must meet the following criteria:
a. Receive a grade of $B(3.0)$ or better in Public Health 101 and 292. These courses cannot be taken for credit/no credit (Cr/NC);
b. Complete each remaining course in preparation for the major with a minimum grade of $C$. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
c. Complete all courses in preparation for the major with a minimum GPA of 2.75;
d. Have a cumulative GPA of 2.90 or better.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Public Health Major

With the B.S. Degree in Applied Arts and Sciences

## (Major Code: 12141) (SIMS Code: 557303)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A minor is not required with this major.
Preparation for the Major. Public Health 101, 292; Biology 100, 100L, 211, 212; Chemistry 100; Psychology 101; Sociology 101, and either Psychology 280 or Sociology 201. (29 units)

Public Health 101 and 292 may not be taken $\mathrm{Cr} / \mathrm{NC}$. The minimum grade for Public Health 101 and 292 is B(3.0) or better. Each remaining course in preparation for the major must be completed with a minimum grade of $C(2.0)$. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). Complete all courses in preparation for the major with a minimum GPA of 2.75.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or Rhetoric and Writing Studies 305W or Linguistics 305W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. All public health majors are required to participate in a pre-approved international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course will be substituted). Specific details can be found on the college website at http://www.chhs.sdsu.edu/international.

To meet the international experience requirement, majors must complete one of the following:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;

OR
5. One course selected from:

- Health and Human Services 290 or 350;
- Asian Studies 490;
- Education 450;
- General Studies 450;
- International Security and Conflict Resolution 450;
- Latin American Studies 320, 450, or 550;
- Political Science 450;
- Public Health 550;
- Science 350.

Major. A minimum of 51 upper division units to include Public Health 300, 302, 304, 305, 306, 307, 401, 402, 450, 490A, 490B, 490 C ; and at least 15 units selected from the following:
a. Twelve units of electives from Public Health 330, 331, 353, 362, 395, 451, 452, 496 (maximum of three units) or General Studies 340. Other electives as selected and offered by the School of Public Health, with approval of academic adviser.
b. Three units from one of the following categories during the fall or spring of the senior year:
Peer Health Education. Public Health 480.
Practice. Public Health 497 (Supervised Field Experience); internship from a list of selected public health agencies.
Preprofessional. Science courses selected with approval of School of Public Health undergraduate academic adviser.
Research. Public Health 499 (Special Study) and completion of a senior research paper under guidance of a faculty member. Must receive approval from the undergraduate public health adviser. Senior standing in public health and Public Health 402, 490A, 490B, and credit or concurrent registration in Public Health 490C.
Time Limitation. All public health courses taken for the major must have been taken and completed within seven years of the granting of the undergraduate degree. Courses taken prior to the seven year rule must be repeated. This policy applies to courses taken at SDSU or transferred from another four-year college or university or appropriate courses from a community college. No exceptions will be made to this policy.

## Public Health Minor <br> (SIMS Code: 557304)

The minor in public health consists of a minimum of 18 units, to include Public Health 101, 292, 302, and nine units selected from Public Health 330, 331, 353, 362, 450, 451, 452, 480, 496 (maximum of three units).

Public Health 101 and 292 must be completed with a grade of B (3.0) or better and students must have a cumulative GPA of 2.75 or better to enroll in the required 300 -level public health courses.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Courses (P H)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

## P H 101. Introduction to Public Health (3)

Epidemics, environment, and community health challenges, including educational, political, environmental, regulatory, and organizational factors that support health of population groups and communities.

## P H 250. Infections and Epidemics (3) [GE]

Concepts and impacts of infectious diseases on human populations. Quantitative reasoning to solve epidemiologic mysteries. Case studies and outbreak investigations.
P H 292. History of Public Health (3)
Prerequisite: Public Health 101 with a grade of $\mathrm{B}(3.0)$ or better. Open only to public health majors.
Historical and contemporary issues surrounding population health. Public health responses, outcomes of those responses, and concerns over time.

## P H 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
P H 300. Professionalism and Public Health (3)
Prerequisite: Public Health 101 with a grade of B (3.0) or better. Open only to public health majors.

Best practices for healthcare working professionals. Job searches, résumés, statements of purpose, written communications. Organizational behaviors, culture, and structure.
P H 302. Communicable and Chronic Disease (3)
Prerequisite: Open to public health majors and minors.
Impact of infectious and chronic diseases on health of the population. Epidemiologic methods, behavioral and biologic determinants, modes of transmission, and risk factors.

## P H 303. Health Behavior in Community Settings (3)

Prerequisite: Public Health 302.
Behavior change theory, principles, predictive models, and their application to health behavior change programs. Review of research methods related to individuals and communities. Analysis of major health behavior change programs.

## P H 304. Environment and Public Health (3)

Prerequisite: Public Health 302 . Open to public health majors and minors.

Environmental hazards of living and working in both industrialized and lesser developed societies. Chemical, biological, and physical agents in food, air, water, and soil.
P H 305. Medical Care Organization and Delivery (3)
Prerequisite: Public Health 302.
Organizational, economic, financial, political, and cultural factors affecting finance and delivery of health and medical services in the U.S. Topics include insurance, managed care, reimbursement, private and public programs, and regulation.

## P H 306. Public Health Research (3)

Prerequisite: Public Health 101. Open only to public health majors.
Methodological, ethical, topical issues in current public health research. Basic principles and different approaches to research designs and methods applicable to writing proposals and other documents in academic and professional settings. (Formerly numbered Public Health 295.)

## P H 307. Applied Biostatistics in Public Health (3)

Prerequisite: Public Health 101, 302, Psychology 280 or Sociology 201. Open only to public health majors.

Data analysis and statistical inference in medical and health sciences to include data description and exploratory analysis, screening tests for disease, and statistical methods for evaluating association of factors with health outcomes.
P H 330. Plagues Through the Ages (3) [GE]
Political, economic, religious, and cultural effects of disease. Significant role epidemics and disease have played in development of civilizations from beginning of recorded history to present. (Formerly numbered General Studies 330.)
P H 331. Emergency Preparedness and Disaster Response (3) Prerequisite: Public Health 302.
Roles and responsibilities of public health in disaster preparation, mitigation, planning, and response to epidemics, pandemics, natural disasters and bioterrorism, includes disaster assessment, surveillance, risk management, and principles of disaster planning.
P H 332. Public Health Nutrition (3)
Prerequisite: Public Health 101.
Importance of nutrition to the health of populations throughout the life-course.
P H 353. Human Sexuality and Disease (3) [GE]
Development of sexual values, attitudes, and behaviors across ages, including evolution and occurrence of sexually transmitted infections worldwide. Focus on biological, medical, psychological, sociocultural, and political factors.

## P H 362. International Health (3) [GE]

Population dynamics, vital statistics, global disease patterns, and analysis of variations among nations and cultures with respect to health problems and health care services.
P H 395. Emerging Topics in Public Health (3)
Prerequisite: Open only to public health majors.
Emergent topics that may include global warming, gun violence, health disparities, LGBTQ+ health, and the penal system.
P H 401. Biological Basis of Disease (3)
Prerequisite: Public Health 304.
Prevalent health issues, problems, and social consequences surrounding conditions such as alcoholism, cancer, heart disease, HIV/ AIDS, and stroke. Disease protective factors, risks, and screening processes.

## P H 402. Public Health Communications (3)

Prerequisites: Public Health 304. Open only to public health majors.

Effective communication techniques used in public health campaigns, social marketing, and risk communication. Use of technology to design and conduct public health campaigns which focus on recognizing and overcoming communication barriers, including cross-cultural issues.

## P H 450. Public Health Policy (3)

Prerequisite: Public Health 302. Recommended: Public Health 305.

Political, economic, cultural, institutional, and social factors influencing development and implementation of policy. U.S. and international private and public health organizations and their roles in shaping health policy. Public health advocacy by organizations.

## P H 451. Public Health and Food Safety (3)

Prerequisite: Upper division standing.
Risk factors for foodborne illness, to include case studies of domestic and international outbreaks. Food safety, foodborne illness, food safety measures and prevention, management and regulation, sustainability.

## PH 452. Health Impacts of Climate Change (3)

Prerequisite: Public Health 304.
Biological, chemical, physical, and social factors contributing to climate change and human health. Greenhouse effect, health impacts and adaptation, climate change projections, and climate mitigation.
P H 480. Peer Health Education (2-3)
Communicating health information to peers. Health issues relevant to university population. Health promotion strategies and tactics.

## P H 490A. Health Data Analysis (3)

Prerequisite: Public Health 302.
Identifying, retrieving, and using health data, with emphasis on statistical applications and interpretation of results for changing policy and health programs.

## P H 490B. Planning Public Health Programs (3)

Prerequisites: Public Health 304 and 490A.
Public health programming models, including community needs assessment, goals, objectives, and strategies for effective public health interventions. Preparation of grant proposals.

## P H 490C. Public Health Program Evaluation (3)

Prerequisite: Public Health 490B.
Quantitative and qualitative evaluation methods in public health programs.
P H 496. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.
P H 497. Supervised Specialization in Public Health (1-6)
Prerequisites: Senior standing in public health and Public Health 304, 305, 402, 490B, and credit or concurrent registration in Public Health 490C.

Placement in a public health environment. Maximum credit six units.

## P H 499. Special Study (1-3)

Prerequisite: Consent of special study adviser.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSE

## (Also Acceptable for Advanced Degrees)

P H 550. Applied International Public Health (3)
Prerequisite: Public Health 101 or graduate standing.
Global cultural, economic, health, political, and social challenges of different countries. Application of public health concepts in a particular country.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

in the L. Robert Payne School of Hospitality and Tourism Management in the College of Professional Studies and Fine Arts

OFFICE: Professional Studies and Fine Arts 436B*
TELEPHONE: 619-594-5110 / FAX: 619-594-4443
WEBSITE: http://www.sdsu.edu/htm
*PSFA office locations are subject to change due to construction. Check the website at http://psfa.sdsu.edu for current office locations.

Accredited by the National Recreation and Parks Association.
Faculty
Emeritus: Dixon, Duncan, Hanson, Hutchinson, Lamke, Peterson, Rankin
Director: Winston
Professor: Beck
Associate Professors: Ponting, Sasidharan
Lecturers: DeSoto, Greenberg, Hemmens, Higgins, Ramaeker
Offered by the L. Robert Payne School of Hospitality and Tourism Management
Major in recreation administration with the B.S. degree in applied arts and sciences.
Emphasis in outdoor resource management.
Emphasis in recreation systems management.
Emphasis in sustainable tourism management.
Minor in recreation.

## The Major

A commitment to working with people to enhance the quality of their lives is important to a study of recreation and tourism.

Increasingly diverse opportunities are available in the recreation and tourism profession. The major offers a sufficiently wide range of courses for students who may wish to enter diverse recreation, tourism, or human services fields.

Students in this major elect one of three areas of emphasis. The outdoor resource management emphasis stresses conservation, natural science, ecology, and recreation/park administration. Society's efforts to sustain a balance between the environment and recreational use are studied. Graduates find employment as naturalists, outdoor education specialists, outdoor resource management planners, park interpreters, and park rangers.

Recreation systems management stresses the effective organization, administration, and supervision of recreation, park, and tourism agencies, both public and private. Graduates find employment as administrators and supervisors with public, private or commercial park and recreation agencies. They assume professional positions with youth and family serving agencies, private clubs and condominium associations, a variety of leisure related businesses including tourism agencies, and municipal, county, and state organizations.

Sustainable tourism management prepares students to work in tourism, recreation, cultural, natural resource, and sports settings. It stresses the cultural and ecological tourism leadership needs of new tourism professionals by emphasizing the linkages between the economic, environmental, and social (including cultural and political) spheres and involves an interdisciplinary approach. Students learn about assessment, programming, and evaluation for planning and management of sustainable tourism businesses. Graduates find employment as managers and directors with transportation agencies, destination management organizations, travel and tour companies, tourism attractions, leisure, recreation, and sports organizations, cultural industries, adventure and ecotourism services, and lodging enterprises.

The sustainable tourism management emphasis requires international experience. Refer to the international experience section under the requirements for the Emphasis in Sustainable Tourism Management.

## Advising

All students admitted to the university with a declared major in recreation administration must attend an advising meeting with the undergraduate advisers in the school every semester.

## Impacted Program

The recreation administration major and emphases are impacted programs. To be admitted to the recreation administration major or an emphasis, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.3.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Recreation Administration Major

With the B.S. Degree in Applied Arts and Sciences (Major Code: 21031)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

The major in recreation administration must be planned with an emphasis in outdoor resource management, recreation systems management, or sustainable tourism management.

A minor is not required with this major.

## Emphasis in Outdoor Resource Management (SIMS Code: 667751)

Preparation for the Major. Recreation and Tourism Management 101, 107, 284; Biology 100 or 101; Geography 102, 104; Geological Sciences 100, 101; Professional Studies and Fine Arts 100 or Psychology 101. (26 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Recreation and Tourism Management 396W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 51 upper division units to include Oceanography 320; Recreation and Tourism Management 304, 305, 351, 404, 469, 470, 485, 487, 489, 498 (12 units); nine units selected from Recreation and Tourism Management 468, 483, 484, 496; Anthropology 402; Biology 315, 327; Geography 370, 570, 572, 575; Geological Sciences 301; Philosophy 332 [or Sustainability 332]; Religious Studies 376 (or other upper division courses may be substituted with approval of the adviser).

## Emphasis in Recreation Systems Management

 (SIMS Code: 667765)Preparation for the Major. Recreation and Tourism Management 101, 107, 284; Biology 100 or 101; Management Information Systems 180; Psychology 101; Sociology 101; and six units selected from Economics 101, 102; Finance 240; Hospitality and Tourism Management 223. (28 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Recreation and Tourism Management 396W with a grade of $C$ (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 51 upper division units to include Recreation and Tourism Management 304, 305, 404, 468, 469, 470, 498 (12 units); Psychology 340 or Sociology 355; nine units selected from Recreation and Tourism Management 340, 351, 475, 483, 489; Hospitality and Tourism Management 430, 433, 435; and nine units selected from Business Administration 350, 370; Management 352; Public Administration 350; Sociology 444.

## Emphasis in Sustainable Tourism Management (SIMS Code: 667766)

Preparation for the Major. Recreation and Tourism Management 101, 284; Accountancy 201; Economics 101, 102; Geography 101, 101L, 102; Hospitality and Tourism Management 223. (25 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Recreation and Tourism Management 396W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience Requirement. All majors in the sustainable tourism management emphasis are required to complete an international experience requirement. To meet this requirement, majors must complete one of the following with the preapproved and written consent of the undergraduate adviser:

1. International Field Trip;
2. International Internship;
3. International Student Exchange;
4. CSU Study Abroad Program;
5. International Professional Engagement

Scholarships are available for the international experience. The international experience should meet the student learning outcomes of the emphasis in sustainable tourism management. International experience must follow international experiences policy and guidelines. See adviser for details.

Major. A minimum of 51 upper division units to include Recreation and Tourism Management 304, 404, 413, 470, 477, 487, 498 ( 12 units); and 21 units selected from five competency areas. At least three units must be selected from each of the following five competency areas:

1. Environmental Sustainability: Biology 315; Geography 370, 409.
2. Social/Cultural Sustainability, Social Justice, and Equity: Recreation and Tourism Management 351; Hospitality and Tourism Management 370 [or American Indian Studies 370]; International Security and Conflict Resolution 301; Philosophy 332 [or Sustainability 332].
3. Economic Sustainability: Economics 455, 456.
4. Sustainable Development: Environmental Engineering 320; Political Science 334 [or Sustainability 334].
5. Field Application: Recreation and Tourism Management 305, 469, 489.

## Recreation Minor

(SIMS Code: 667701)
The minor in recreation consists of a minimum of 15 units to include Recreation and Tourism Management 101, 304, 305 or 487, 404, and three additional upper division units selected from Recreation and Tourism Management 351, 469, 470, 475, 484, 489, 499.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Courses (RTM)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

RTM 101. Recreation and Tourism Management (3)
Role of recreation and tourism systems in contemporary society. History and philosophy, scope of services, facilities, programs, personnel, and evaluation.
RTM 107. Recreation Programming and Leadership (4)
Three lectures and three hours of laboratory.
Theories, principles, and techniques of group leadership, group dynamics, communication, problem-solving, creativity, program planning, and publicity as they relate to selected recreation systems. Student ePortfolio is initiated.
RTM 200. Recreation, Travel, and Self-Awareness (3) [GE]
How recreation and travel are influenced by economic, environmental, political, and socio-cultural forces. Impacts of recreation and travel on well-being and self-awareness.

## RTM 284. Supervised Field Work (3) Cr/NC

Prerequisites: Consent of instructor or department chair and 125 hours experience in recreation leadership.

Observation and participation in community recreation leadership. Practical experience in a variety of recreational settings. Eight hours per week at an agency.
RTM 290. Quantitative and Qualitative Literacy in Tourism (3)
Prerequisite: Recreation and Tourism Management 101 or Hospitality and Tourism Management 201 with a minimum grade of $C$ (2.0).

Quantitative and qualitative methods in hospitality, recreation, and tourism fields. Gathering data from sources, summarizing data points, analyses, reporting findings/results, conclusions and recommendations.

## RTM 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
RTM 304. Leisure and Tourism (3) [GE]
Study of leisure and its impact on contemporary life; issues affecting recreation in today's urbanized society.
RTM 305. Wilderness and the Leisure Experience (3) [GE]
Prerequisite: Biology 100 or 101.
Values of protected landscapes to individuals and society. Scientific, political, international, and ethical dimensions of natural landscapes. Implications for protection, visitor management, and sustainable tourism.

## RTM 340. Conduct of Recreational Sports (3)

Three lectures plus outside practical experience in the conduct of recreational sports programs.

Organization of competition, community sports programs, administration of intramural athletics, and techniques of officiating.
RTM 351. Recreation Therapy and Special Populations (3)
Sociopsychological aspects of special populations and their implications for leisure pursuits. Field trips may be included.
RTM 396W. Writing in Recreation Settings (3)
Prerequisites: Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a grade of C (2.0) or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Theory and practice of writing in the field of recreation and parks with application to various settings.

RTM 404. Cross-Cultural Perspectives of Tourism (3) [GE]
Concepts, definitions, and measures of essential cultural components of tourism. Integrated view of interrelated socio-cultural tourism issues with an understanding and appreciation of diverse cultures.

## RTM 413. Cultural Tourism (3)

Two lectures and two hours of activity.
Prerequisite: Recreation and Tourism Management 470.
Concepts of cultural tourism and cultural heritage management. Strategies for planning of cultural tourism resources and for development of cultural tourism initiatives. Evaluating tourism potential of cultural or heritage assets.
RTM 468. Marketing, Financing, and Assessment in Recreation and Tourism Management (3)
Marketing, financing, and assessment specifically related to recreation and tourism management to include services development, pricing, promotion, distribution; budget development, revenue generation, assets management, controls; evaluation and research process as they relate to service development and delivery.
RTM 469. Administration and Operation of Recreation and Tourism Agencies (3)
Prerequisite: Recreation and Tourism Management 470 or 475.
Administrative and operational aspects of managing and leading in recreation and tourism agencies to include liability, risk management, administrative regulations; information/decision systems in organizations; strategic planning; operation of facilities/areas; human resource functions related to successful service delivery.

## RTM 470. Global Sustainable Tourism Management (3)

Prerequisite: Recreation and Tourism Management 101 or Hospitality and Tourism Management 201.

Global tourism management, economics, development and sustainability. Social, cultural, and environmental impact indicators and management tools for sustainable development.

## RTM 475. Commercial Recreation and Attractions

Management (3)
Analysis of commercial recreation field, including design, development, programming and marketing aspects of various commercial recreation enterprises.

## RTM 477. Sustainable Tourism Planning (3)

Prerequisite: Recreation and Tourism Management 101.
Nature and scope of sustainable tourism planning. Approaches, principles, and processes for creating sustainability value in tourism. Sustainability assessment and corporate social responsibility for tourism amenities, attractions, services, transportation and facilities.
RTM 483. Outdoor Education and Camp Administration (3)
Prerequisite: Recreation and Tourism Management 101.
Philosophy, theory, methods, application, and scope of outdoor education in recreation and ecotourism camp settings. Management of resident, day, and travel camps.
RTM 484. Directed Leadership (3) $\mathrm{Cr} / \mathrm{NC}$
One lecture and eight hours of supervised activity.
Prerequisite: Recreation and Tourism Management 284.
Supervised leadership experience in public and private recreation agencies. Maximum credit six units.

## RTM 485. Outdoor Recreation Planning and Policy (3)

Nature and scope of recreation in nonurban areas. Public demand for recreation and its impact on natural resources. Management, planning, research and operation of regional and national park and recreation areas.
RTM 487. Environmental and Cultural Interpretation (3)
Prerequisite: Recreation and Tourism Management 101.
Philosophy, theory, methods, application, and scope of cultural interpretation in recreation and tourism settings.
RTM 489. Outdoor Leadership and Adventure Programming (3)
Prerequisite: Recreation and Tourism Management 305.
Theoretical principles and experience in leadership, judgment, and decision making in outdoor adventure programming.

## RTM 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## RTM 498. Internship in Recreation and Tourism

Management (6 or 12) Cr/NC
Twenty off-campus hours required per week for 6-unit program, or 40 off-campus hours required per week for 12 -unit programs.

Prerequisites: Consent of instructor or department chair, completion of all required lower division recreation courses, and completion of both Standard or Multimedia First Aid certificate and CPR certificate by end of semester.

For six unit internship: 250 hours of professional work experience in recreation and tourism management. For 12 unit internship: 500 hours required Credit for course requires completion of ePortfolio. Maximum credit 12 units.

## RTM 499. Special Study (1-3)

Prerequisite: Consent of special study adviser. Individual study. Maximum credit six units.

# Religious Studies 

In the College of Arts and Letters

OFFICE: Arts and Letters 662
TELEPHONE: 619-594-5185 / FAX: 619-594-1004
E-MAIL: religious.studies@sdsu.edu
WEBSITE: http://religion.sdsu.edu
Faculty
Emeritus: Downing, Frost, Gefter, Hansen, Holler, Khalil, Moore,
Sparks
Chair: Levitt
Professors: Levitt, Mohammed, Timalsina
Assistant Professors: Bartel, Thomases, Whitaker
Lecturers: Caldwell, Feres, Gillman, Kirkegaard, Kulkhen, Meltzer, Sandvig, Stewart

## Offered by the Department

Major in religious studies with the B.A. degree
in liberal arts and sciences.
Minor in religious studies.
Certificate in global religious literacy.
Certificate in Indian religions, cultures, and traditions.

## The Major

The academic study of religion is central to the creation of a community of world citizens. Our program is designed for students who live in a pluralistic society and who wish to investigate the role religions play in human life and society. Because religion has shaped the human story of almost every culture, it is difficult to understand human behavior or to interpret world events without grasping how religion has helped to determine them. As United States Supreme Court Justices Clark and Goldberg wrote in their decision allowing the study of religion in public schools, "one's education is not complete without a study of comparative religion or the history of religion and its relationship to the advancement of civilization." Part of the liberal arts, religious studies employs critical analysis and methods from a variety of disciplines to understand religious traditions as well as to question the dogmas, stereotypes, and prejudices that may surround those traditions. In addition to investigating religious symbols, texts, practices, and belief systems, the study of religion examines the relationship of religion to ethics, contemporary social issues, politics, history, psychology, science, literature, and the arts.

## Career Outlook

Religious studies prepares students for any career that requires critical thinking, analysis, oral and written communication skills, and the ability to reflect on questions of meaning and value. The study of religion is excellent pre-professional preparation for fields such as law, teaching, medicine, counseling, social work, conflict resolution, international business, foreign service, journalism, various ministries and other careers in non-profit organizations and public service. While some of our majors go on to do graduate work in religion or related academic fields, other graduates find themselves well prepared for careers requiring imagination, problem solving, communication, self-understanding, and awareness of human diversity.

## Double Majors and The Minor

Because religious studies is interdisciplinary and multicultural it is an excellent degree to complement many other majors. Double majors are easily accommodated within a well-designed fouryear course of study, since the religious studies major has only a 36 -unit requirement. Graduates from the program have had double majors with biology, communication, history, psychology, and other fields where the study of religion enhances or focuses the second major. The 15 -unit minor is a less ambitious way to combine your major interests with the academic study of religion. Anyone who is interested in human beliefs, behavior, and values would benefit from a minor in religious studies.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Impacted Program

The religious studies major is an impacted program. To be admitted to the religious studies major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Religious Studies Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 15101) (SIMS Code: 116101)
All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in religious studies courses can apply to the degree.

A minor is not required with this major.
Preparation for the Major. Religious Studies 101. (3 units)
Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above before taking Religious Studies 396W and earn a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. The department encourages international experience for its majors. It will facilitate the transfer of religious studies credits for appropriate study abroad, student exchange, or other overseas programs. International internships may also receive religious studies credit, if approved in advance by a department adviser.

Major. A minimum of 33 upper division units in religious studies to include Religious Studies 396W, 400, and at least three units from Texts, nine units from Traditions, three units from Theories and Methods (in addition to Religious Studies 396W and 400), six units from Critical Issues in Religion, and six additional units selected from any of the four upper division areas.

Area A, Texts: Religious Studies 301, 305, 310, 315, 373. (3 units)
Area B, Traditions: Religious Studies 320, 325, 328, 330, 337, 338, 339, 345, 351 [or Africana Studies 351], 352, 357, 382, 458 [or Asian Studies 458], 470 [or American Indian Studies 470], 507 [or History 507], Asian Studies 351 [or Philosophy 351], Philosophy 353, 401A, 565*. (9 units)

Area C, Theories and Methods: Religious Studies 343* [or Sociology 338*], 350, 353, 395, 424* [or Anthropology 424*], Philosophy 535*. (3 units)

Area D, Critical Issues in Religion: Religious Studies 341, 356, 363, 364, 370, 376, 379, 380, 390A, 390B, 405 [or Humanities 405], 406, 411 [or Humanities 411], Political Science 562*, Women's Studies 515*. (6 units)

Courses with variable content $(496,499,581,583,596)$ may be used in the four areas of study when deemed relevant by the department adviser.
*Additional prerequisites required.

## Religious Studies Minor

## (SIMS Code: 116101)

The minor in religious studies consists of a minimum of 15 units taken in the Department of Religious Studies to include at least three lower division units and 12 upper division units.

International Experience. The department encourages international experience for students in the religious studies minor. It will facilitate the transfer of religious studies credits for appropriate study abroad, student exchange, or other overseas programs. International internships may also receive religious studies credit, if approved in advance by a department adviser.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Global Religious Literacy Certificate

## (SIMS Code: 116107)

The Department of Religious Studies offers a basic certificate in global religious literacy, which allows students to explore various religious traditions. Students completing the certificate program will attain:

1. A basic understanding of the beliefs, central texts (where applicable), contemporary manifestations, history, and practices of several of the world's religious traditions as they arose out of and continue to be shaped by particular cultural, historical, and social contexts.
2. The ability to discern and explore the religious dimensions of cultural, political, social, and expressions across time and place.
The certificate requires completion of 15 units to include Religious Studies 103 and 12 units selected from Religious Studies $320,325,328,338,341,345,352$, or 357.

Students must obtain a grade of $\mathrm{C}(2.0)$ or better in each of the certificate courses. Courses in the certificate may be used towards the major but may not be used towards the religious studies minor. Students may obtain a certificate in global religious literacy without majoring in religious studies. To register in the certificate program, contact the certificate adviser in the Department of Religious Studies.

## Indian Religions, Cultures, and Traditions Certificate (SIMS Code: 116106)

The Department of Religious Studies offers a basic certificate in Indian religions, cultures, and traditions. The certificate requires 15 units to include Religious Studies 339 and 12 units selected from Religious Studies 315, 338, 352, 357, 379, or Philosophy 565.

Students must obtain a grade of $C(2.0)$ or better in each of the certificate courses. Courses in the certificate may be used toward the major but may not be used towards the religious studies minor. Students may obtain a certificate in Indian religions, cultures, and traditions without majoring in religious studies. To register in the certificate program, contact the certificate adviser in the Department of Religious Studies.

## Courses (REL S)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

## REL S 100. Exploring the Bible (3) [GE]

Basic content and themes of the Hebrew Bible and New Testament using methods of contemporary biblical studies. Attention to ancient Near Eastern and Greco-Roman cultural settings as well as the impact of the Bible on contemporary culture.

## REL S 101. World Religions (3) [GE]

Major world and selected tribal traditions from primal times to present. Broad historical development and philosophical overview including founders, teachings, beliefs, practices, and interactions with culture, such as art, literature, politics.

## REL S 102. Exploring the Qur'an (3) [GE]

Basic content and themes of the Qur'an from an historical perspective using academic methods of study. Consideration of relationships to other Abrahamic scriptures. Exegetical approaches from sectarian and modern political viewpoints.

## REL S 103. American Religious Diversity (3) [GE]

Religious identities and traditions of diverse peoples living in the US. Major world religions in context of contemporary multicultural America. Religions of indigenous peoples and religious movements which have arisen in US.

## REL S 258. Death, Dying, and Afterlife (3) [GE]

Diverse ways religions deal with process of dying and rituals involved in transition of life to death. Grieving, end-of-life decisions, views on afterlife. (Formerly numbered Religious Studies 358.)

## REL S 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
NOTE: Courses for Area (A) Texts; or Area (B) Traditions; or Area (C) Theories and Methods; or Area (D) Critical Issues in Religion, are identified in the course title as (A), (B), (C), or (D).

## REL S 301. Hebrew Bible (A) (3) [GE]

Prerequisites: Three units of religious studies.
Literature, history, major themes of Bible; methods and concerns of contemporary biblical studies. Situates folkloric, political, heroic, poetic, and religious meanings of texts among their original audiences.

## REL S 305. The New Testament (A) (3) [GE]

Prerequisites: Three units of religious studies.
Structure, composition, meaning of New Testament; methods for interpreting Biblical texts. Focus on letters of Paul, post-Pauline writings, Gospel accounts of Jesus's life.

## REL S 310. The Qur'an (A) (3) [GE]

Prerequisites: Three units of religious studies
Major themes of Qur'an including cosmology, eschatology, good and evil, gender, God and monotheism, People of the Book (Jews and Christians), and role of religion in society. Attention to historical period in which the Qur'an was compiled.
REL S 315. Yoga: Theory and Practice (A) (3) [GE]
Prerequisites: Three units of religious studies.
Cultural, historical, and philosophical aspects of yogic tradition since its earliest history to modern days. Texts, traditions, and prominent figures in yogic tradition providing a conceptual basis for yogic practice.

## REL S 320. Judaism (B) (3) [GE]

Prerequisites: Three units of religious studies.
Jewish history, culture, theory, and practice. Biblical roots of modern Jewish beliefs, basic movements within modern Judaism; Jewish calendar and Jewish life cycle as seen in Hebrew Bible, short stories, and films.

REL S 325. Christianity (B) (3) [GE]
Prerequisites: Three units of religious studies.
Historical development of Christian traditions and major issues confronting Christianity today. Beliefs and practices important to Christian self-understanding, debates over authority of Bible, accommodations to modern science, and relationship with non-Christian religions.
REL S 328. Islam (B) (3) [GE]
Prerequisites: Three units of religious studies.
Islamic religion and culture in Asia, Africa, and Near East. History, doctrines, practices, literatures, social and intellectual movements, role of Mohammed, and gender relations within Islam as understood in global context.

## REL S 330. Abrahamic Faiths: Shared Stories (B) (3) [GE]

Prerequisites: Three units of religious studies.
Theological, textual, and political relations among Judaism, Christianity, and Islam. Shared religious practices and stories such as creation, sacrifice, theories of evil and salvation, prophecy and Messianic expectations. Contemporary issues regarding gender, fundamentalism, and rise of nationalism.
REL S 337. Asian Religions in America (B) (3) [GE]
Prerequisites: Three units of religious studies.
History, development, and study of Asian American religions. Issues and problems particular to predicaments and situations of Asian Americans and Pacific Islanders in the U.S.
REL S 338. Buddhism (B) (3) [GE]
Prerequisites: Three units of religious studies.
Life and teachings of Buddha, foundational concepts of Theravada, Mahayana, and Vajrayana Buddhism. Buddhist psychology and soteriology, meditative techniques, ethical issues; contemporary Buddhism, particularly in America.
REL S 339. Religions of India (B) (3) [GE]
Prerequisites: Three units of religious studies.
Religious pluralism of Indian sub-continent. Influences of Hinduism, Buddhism, Jainism, Islam, and Sikhism upon each other and social structures of gender, race, and caste. Karma and rebirth, liberation theories and practices, the interaction of mainstream religions with minority and indigenous tribal rituals and beliefs.
REL S 341. Zen and the Way of Japanese Religions (D) (3) [GE]
Prerequisites: Three units of religious studies.
Historical analysis of major components of classical, medieval, early modern and modern religious systems of Japan through texts, images, rituals, and institutions.

## REL S 343. Sociology of Religion (C) (3) [GE]

(Same course as Sociology 338)
Prerequisite: Sociology 101.
Forms of religious belief, knowledge, practice, and experience tied to different social arrangements and historical periods. Consequences of religion for community and society. Secularization and conversion processes in modern industrial societies.

## REL S 345. Religions of East Asia (B) (3) [GE]

Prerequisites: Three units of religious studies.
Confucianism, Taoism, and Buddhism in broad historical and cultural context. Focus on Chan (Zen) school of Buddhism, Confucius, neo-Confucianism of Ju Xi, and Taoist masters Lao Ze and Chuang Ze.

## REL S 350. Experiencing the Sacred (C) (3) [GE]

Prerequisites: Three units of religious studies.
Nature and scope of religious experience; transformations of consciousness and self through altered modes of human awareness and mind-body relationships. Yogic and ascetic experience, Shamanic trance and spirit possession, ecstatic experience and mysticism. Techniques of compassion.

## REL S 351. Black Religions and Spirituality (B) (3)

(Same course as Africana Studies 351)
Major Black religious and spiritual responses and expressions in Africa and Black diaspora, including creation of institutions to support and advance religious and spiritual matters.

## REL S 352. Jainism (B) (3) [GE]

Prerequisites: Three units of religious studies.
Historical development of Jainism from its origins to modernity. Jainism in North America. Jain architecture, art, myths, philosophies, rituals, sacred geographies, and theology.

## REL S 353. Religion and Psychology (C) (3) [GE]

Prerequisites: Three units of religious studies.
Religious dimensions of psyche using insights from academic and transpersonal psychology. Construction of religious identities through spiritual practice and transformation. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units of which three units may be applicable to General Education.

## REL S 356. Hip Hop and Religion (D) (3) [GE]

Study of the intersection between the global hip hop movement and religious traditions from across the world.

## REL S 357. Sikhism (B) (3) [GE]

Prerequisites: Three units of religious studies.
Sikh articles of faith, culture, history, identity, practices, and theories. Sikh attitudes on class, gender, race, and sexual orientation. Development of Sikh religious institutions in America.
REL S 363. Religion and the Sciences (D) (3) [GE]
Prerequisites: Three units of religious studies.
Views of science and religion as separate, conflicting, complementary, and overlapping. Galileo and the Church, the Scopes Trial, and twentieth century physics provide historical examples for study of assumptions about science and religion.

## REL S 364. Religion and Film (D) (3) [GE]

Prerequisites: Three units of religious studies.
Representations of religion in modern cinema and analysis of how religious themes and imagery in film reflect societal values, beliefs, and morals.
REL S 370. Goddess Studies (D) (3) [GE]
Prerequisites: Three units of religious studies.
The divine feminine in mainstream and marginalized religions. Goddess/nature worship and its transformation across time and culture to include ancient religion, mythology, indigenous traditions, and world religions.
REL S 373. Women and the Bible (A) (3) [GE]
Prerequisites: Three units of religious studies.
Narrative, legal, and poetic material about women in Bible. How women are depicted by authors of Bible, lives of women in ancient world, how women and women's studies are transforming biblical studies.

## REL S 376. Nature, Spirituality, Ecology (D) (3) [GE]

Prerequisites: Three units of religious studies.
Cross-cultural religious views of nature. Attention to sacred texts, writings of naturalists, deep ecologists, and ecofeminists on place of nature in spirituality and role of spirituality in ecology.
REL S 379. Religious Violence and Nonviolence (D) (3) [GE]
Prerequisites: Three units of religious studies.
Role of religion in terrorism, hate groups, scapegoating, domestic and ecological violence, versus role of religion in peacemaking and movements for social justice. Nonviolent philosophies of Gandhi, Martin Luther King, Jr., and pacifism in Jain, Buddhist, and Christian traditions.

## REL S 380. Atheism, Humanism, and Secularism (D) (3) [GE]

 Prerequisites: Three units of religious studies.Atheism, humanism, and secularism in western culture to include the creation of institutions that support and advance these movements. Rise of unbelief in reaction to contemporary religious fundamentalism and attacks on science and reason.
REL S 382. California Religion and Spirituality (B) (3) [GE]
Religious and spiritual landscape of California with examination of new and indigenous religious communities.

## REL S 390A-390B. Religion and American

 Institutions (D) (3-3) [GE-AI]Prerequisite: Three units of religious studies.
Major religious movements, events, and issues affecting development of US government and institutions. Religious Studies 390A: From time of Spanish contact to 1900. Religious Studies 390B: Religion's impact in twentieth century. This year-long course satisfies the graduation requirement in American Institutions.

## REL S 395. New Religions (C) (3) [GE]

Prerequisites: Three units of religious studies.
America's alternative religions, popularly called "cults" and why they attract spiritual seekers. New religions and transplanted Asian and African religions. Theoretical structures of belief systems and concrete specifics on different groups.

## REL S 396W. Writing on Religion (C) (3)

Prerequisites: Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a grade of C (2.0) or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Theoretical approaches in study of religion and religious phenomena. Writing in discipline of religious studies through analysis of key thinkers in history of religions.

## REL S 400. Senior Seminar (C) (3)

Prerequisite: Religious Studies 396W; others with consent of department chair.

Senior capstone seminar in major. Discussion and research on topics in religious studies. Formal research paper and presentation.

## REL S 405. Faith and Hope (D) (3) [GE]

(Same course as Humanities 405)
Humanities as expressed in religion. Acquisition and/or loss of faith. Questioning of theological systems. Confrontation with death. Nature of hope. Use of signs, symbols, and narratives to generate social structures. Symbolic and mystical systems of meaning. Influence of religion upon culture.

## REL S 406. God, Gold, and Glory: Religion and Colonial

 Encounter in the Americas (D) (3) [GE]Colonialism, race, and religion in the Americas. The "one drop" rule, colonial evangelizing missions, historical colonial religious forms, and slavery. Capitalism, immigration, and new religious movements.

## REL S 411. Understanding Evil (D) (3) [GE]

(Same course as Humanities 411)
Evil and how the language of evil has been used by diverse religious communities. Conceptions and portrayals of demons, hell, Satan, and vampires. Literature on the Holocaust, terrorism, torture, and war.

## REL S 424. The Supernatural in Cross-Cultural

## Perspective (C) (3) [GE]

(Same course as Anthropology 424)
Prerequisite: Anthropology 102.
Magic and religion. Conceptions of the supernatural in a cross section of world's cultures. Anthropological theories relating to supernatural beliefs and practices.
REL S 458. Asian Traditions (B) (3) [GE]
(Same course as Asian Studies 458)
Prerequisites: Six units of Asian-content courses or upper division standing.

Social, cultural, economic, and political traditions of South, Southeast, and East Asia; how they functioned in theory and practice prior to twentieth century.

## REL S 470. American Indian Spirituality and

Epistemologies (B) (3) [GE]
(Same course as American Indian Studies 470)
Spirits, prophesies, and renewals of the Indian way compared through symbols and ceremony. Religions surveyed as they have been influenced by foreign elements and philosophies. Influences on values and tribalism as reflected through symbols and other measures.
REL S 496. Experimental Topics (A) (B) (C) (D) (1-4)
Prerequisite: Three units of religious studies.
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## REL S 499. Special Study (A) (B) (C) (D) (1-3)

Prerequisite: Twelve upper division units in religious studies.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
NOTE: Courses for Area (A) Texts; or Area (B) Traditions; or Area (C) Theories and Methods; or Area (D) Critical Issues in Religion, are identified in the course title as (A), (B), (C), or (D).
REL S 507. The Reformation (A) (B) (C) (D) (3)
(Same course as History 507)
Continental Europe, 1500-1648. Split of Christendom; political and intellectual dissent; social fabric of family life; relationship between gender, class, and power; cultural stratification of European society.
REL S 581. Major Theme (A) (B) (C) (D) (3)
Prerequisites: Three units of religious studies and upper division or graduate standing.

Advanced systematic study of a theme or motif selected from major religious traditions. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.
REL S 583. Major Tradition (A) (B) (C) (D) (3)
Prerequisites: Three units of religious studies and upper division or graduate standing.

Advanced systematic study of the doctrines, practices, and development of a major religious tradition. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

## REL S 596. Advanced Topics in Religious Studies

## (A) (B) (C) (D) (1-3)

Prerequisite: Consent of instructor.
Advanced selected topics in religious studies. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.

# Rhetoric and Writing Studies 

In the College of Arts and Letters

OFFICE: Storm Hall West 141
TELEPHONE: 619-594-6515 / FAX: 619-594-6530
Faculty
Emeritus: Bryson, Chase, Hindman, Johns, Morgan, Poole, Quandahl, Robinett, Sweedler-Brown
Chair: McClish
Professors: Bordelon, McClish, Ornatowski
Associate Professors: Bekins, Boyd, Minifee, Valentine, Werry
Assistant Professor: Sheppard
Lecturers: Avner, Boeck, Borgen, Brown, Cavender, Cissel, Copeland, Costello, Fielden, Fimbres, Fish, Flewelling, Goodman, Groza, Hall, Hoffman, Holslin, Hughes, Kinkade, Kline, Linfor, Madden, Manley, Merriam, Nerhan, Owens, Parker, Sager, Sherman, Sigmon, Slater, Stein, Tempelton, Thompson, Towner, Underwood, Vanderpot, Whitworth, Williams, J., Williams, M.

## Offered by the Department

Master of Arts degree in rhetoric and writing studies.
Major in rhetoric and writing studies with the B.A. degree in liberal arts and sciences.
Minor in rhetoric and writing studies.
Certificate in professional writing.
Certificate in advanced teaching of writing
(refer to the Graduate Bulletin).

## General Information

The Department of Rhetoric and Writing Studies offers writing programs at all levels for university students. The department works cooperatively with other academic departments and campus groups to plan and develop a comprehensive writing program integrating writing and reading with critical thinking throughout the curriculum.

General Education Program: Completion of courses in this program fulfills the "Written Communication" requirements for the Communication and Critical Thinking portion of the SDSU General Education program.

Upper Division Courses: The department offers writing ("W") courses that satisfy the university's Graduation Writing Assessment Requirement. The department also offers a required course in the teaching of composition for students in the Single Subject Teaching Credential in English degree program.

## The Major

Rhetoric refers to the study and uses of written, spoken, and visual language. From antiquity to the present, rhetoric has included both theory and practice, looking to produce and understand persuasion in social, political, and institutional settings. Rhetoric reflects on the nature and function of discourse in action, investigates literacy and literacy instruction, and offers frameworks for understanding technical and scientific writing as artifacts of communal practice. The primary areas of study for the major are rhetorical theory, literacy and the teaching of writing, and professional (primarily technical and scientific) writing and public discourse.

The purpose of rhetorical education extends beyond understanding literacy as basic skills. The major teaches literacy as an array of advanced language and critical thinking abilities that enhance a person's participation in professional, civic, and personal life. It offers sustained inquiry into the nature of writing and its relationship to knowledge, culture, and professional practice. It involves students in composing a variety of texts for multiple audiences and contexts. It provides a specifically rhetorical framework for analyzing and producing texts that circulate across disciplines and writing cultures.

International and native students who want to develop their analytical reading and writing abilities, and those interested in pursuing graduate work or entering more writing-intensive careers will benefit from the major. While virtually all professions
are enhanced by skills in writing, critical reading, and analytical thinking, the major may be particularly beneficial to students seeking careers in law, business, science, engineering, non-profits, and technical and scientific writing. Teaching at the primary to university levels also offers opportunities for rhetoric majors who continue their education at the graduate level.

The major includes five core courses intended to introduce students to the study of rhetoric, which incorporates a broad range of topics, including rhetorical theory, cultural rhetoric, and digital rhetorics. The field of rhetoric is interdisciplinary in nature and includes coursework in rhetorical history, gender and rhetoric issues, technical and scientific writing, political rhetoric, and culture. Students select the courses that best suit their future career and educational goals.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Impacted Program

The rhetoric and writing studies major is an impacted program. To be admitted to the rhetoric and writing studies major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Rhetoric and Writing Studies Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 15013) (SIMS Code: 112204)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in Rhetoric and Writing Studies courses can apply to the degree.

A minor is not required with this major.
Preparation for the Major. Rhetoric and Writing Studies 200 or Journalism and Media Studies 210; Rhetoric and Writing Studies 250. (6 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above before taking Rhetoric and Writing Studies 500W or 503W and earn a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. The department encourages international experience for its majors. It will facilitate the transfer of rhetoric and writing studies credits for appropriate study abroad, student exchange, or other overseas programs. International internships may also receive rhetoric and writing studies credit, if approved in advance by a department adviser.

Major. A minimum of 30 units in rhetoric and writing studies to include 15 units selected from Rhetoric and Writing Studies 411, $498,500 \mathrm{~W}$ or $503 \mathrm{~W}, 506$, and 510 . The remaining 15 units will be selected from elective courses in the Rhetoric and Writing Studies Department.

## Rhetoric and Writing Studies Minor

(Minor Code: 15013) (SIMS Code: 112220)
Designed for students from across the disciplines, the minor in Rhetoric and Writing Studies provides students with an enhanced awareness of the central role of language and textual practices in every discipline. Thus, both students who want to improve their critical reading, writing, and thinking skills, as well as students interested in pursuing graduate work or entering more writ-ing-intensive professions, will benefit from the minor. The minor includes three core courses intended to introduce students to the study of rhetoric, which incorporates a broad range of topics, including rhetorical theory, cultural rhetoric, and literacy and technology. The minor is also interdisciplinary in nature and includes coursework in rhetoric, communication, linguistics, and education. Students select the courses that best suit their future career and educational goals.

While virtually all professions are enhanced by skills in writing, critical reading, and analytical thinking, the minor is particularly beneficial to students seeking careers in areas such as law, politics, journalism, business, science, engineering, public administration, and education.

The minor in rhetoric and writing studies consists of a minimum of 15 upper division units. Six units must be selected from the core courses, Rhetoric and Writing Studies 411, 500W, 510. The additional nine upper division units must be selected from courses in the Rhetoric and Writing Studies Department.

A minimum of six upper division units must be completed in residence at San Diego State University. In designing the minor, students may not include courses drawn from their major department.

## Professional Writing Certificate (SIMS Code: 112298)

The purpose of this certificate program is to prepare students for careers in professional writing, or for other careers where advanced writing and document design skills are desirable. The program is designed both for students working on degrees in technical or non-technical fields and for professionals seeking career advancement or change.

Applicants to the program must have excellent general writing skills (in specific cases, applicants may be required to take additional coursework to improve writing proficiency) and basic computer literacy.

Students in the program complete 21 units of coursework approved by the director of the program. A minimum grade point average of 3.0 or better must be maintained in certificate coursework, with no less than a C grade in any course. All courses completed with a grade of $B(3.0)$ or better are applicable to the Master of Arts degree in rhetoric and writing studies with a specialization in technical and professional writing. For further information, contact the Department of Rhetoric and Writing Studies.

$$
\begin{array}{cc}
\text { Required courses: (6 units) } \\
\text { RWS 503W } & \text { Professional Writing............................................... } 3 \\
\text { RWS 504 } & \text { Advanced Professional Writing........... }
\end{array}
$$

## Recommended Electives: (12 units)

RWS 411 Digital Rhetorics.......................................... 3
RWS 501 Editing ........................................................... 3
RWS 506 Writing Internship ........................... 3 Cr/NC
RWS 507 Professional Communication in Nonprofit Organizations........................ 3
RWS 508W Scientific Writing.......................................... 3
Three units of electives (and other elective options) may be selected with the approval of the program director. A maximum of six units of transfer credit may be applied to the program. Students should consult with the program director before selecting any courses so that an individualized program of study can be developed.

## Courses (RWS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## EARLY START PROGRAM (ESP)

Beginning with the class of 2012, the California State University (CSU) enacted a systemwide mandatory Early Start Program (ESP) for entering resident CSU freshmen who require academic support in English and/or mathematics. Students attending another CSU campus may enroll in Early Start courses at SDSU.

## LOWER DIVISION COURSES

## (Acceptable for Baccalaureate Credit)

## RWS 100. Rhetoric of Written Argument (3) [GE]

(Same course as English 100)
International students are advised to take Linguistics 100B.
Prerequisite: Satisfaction of the SDSU Written Communication Assessment requirement. (See Graduation Requirements section of catalog.) Proof of completion of prerequisite required.

Writing and reading as critical inquiry, designed to help students undertake university-level writing projects. Focus on rhetoric of written arguments. Students learn to use sources in their writing and make appropriate decisions about structure, cohesion, and rhetorical conventions. Not open to students with credit in a higher-numbered composition course or Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or English 100 or Linguistics 100B or Rhetoric and Writing Studies 105B.

## RWS 105A. Rhetoric of Written Argument Stretch I (3)

Prerequisite: Open to students who have not satisfied the SDSU Written Communication Assessment requirement.

First of two-semester stretch sequence. Writing and reading as critical inquiry. Rhetoric of written arguments. Cohesion, rhetorical conventions, structure, and utilization of sources. Not open to students with credit in a higher-numbered composition course or Rhetoric and Writing Studies 100 [or English 100] or 105B or Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100A or 100B.
RWS 105B. Rhetoric of Written Argument Stretch II (3) [GE]
Prerequisite: Rhetoric and Writing Studies 105A with a grade of C- (1.7) or better.

Second of two-semester stretch sequence. Writing and reading as critical inquiry. Rhetoric of written arguments. Cohesion, rhetorical conventions, structure, and utilization of sources. Not open to students with credit in a higher-numbered composition course or Rhetoric and Writing Studies 100 [or English 100] or Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100B.

## RWS 200. Rhetoric of Written Arguments in Context (3) [GE]

 (Same course as English 200)International students are advised to take Linguistics 200.
Prerequisites: Satisfaction of the SDSU Written Communication Assessment requirement and Rhetoric and Writing Studies 100 [or English 100] or 105B, or Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100B. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Further practice in writing, reading, and critical thinking. Emphasis on rhetoric of written arguments in context and using multiple sources in writing. Continued attention to structure, cohesion, and rhetorical conventions. Not open to students with credit in Africana Studies 200, American Indian Studies 225, Chicana and Chicano Studies 200, English 200, or Linguistics 200. Completion of Rhetoric and Writing Studies 200 may require completion of the library workbook assignment.

## RWS 220. Rhetoric of Written Arguments and the Tutoring of Writing (3) [GE]

Prerequisites: Satisfaction of the SDSU Written Communication Assessment requirement and Rhetoric and Writing Studies 100 [or English 100] or 105B, or Africana Studies 120, American Indian Studies 120, Chicana and Chicano Studies 111B, or Linguistics 100B. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Critical thinking, reading, and writing. Rhetoric of written arguments in exploring theories and practices related to learning to write and the tutoring of writing. Cohesion, rhetorical conventions, and structure. Not open to students with credit in Africana Studies 200, American Indian Studies 225, Chicana and Chicano Studies 200, Linguistics 200, or Rhetoric and Writing Studies 200 [or English 200].

## RWS 250. Rhetoric in Everyday Life (3) [GE]

Rhetorical analysis of written, visual, and electronic texts. How rhetorical theories and perspectives help us understand the workings of popular culture, political discourse, visual images, legal arguments, social media, and other texts encountered in everyday life.
RWS 253. Grammar and Usage for Writers (3)
(Same course as Linguistics 253)
Prerequisite: Satisfaction of the SDSU Written Communication Assessment requirement.

Instruction in sentence structure with attention to integrating sentences into their logical and rhetorical contexts. Identifying and understanding source of sentence-level writing problems.

## RWS 279. Introduction to Academic Reading and Writing (3) (Offered only at SDSU-IV)

Prerequisite: Open only to students who have score of 4 or less on the Writing Placement Assessment and whose examinations have been formally reviewed.

University-level reading and writing, with emphasis on argumentation, analysis, and learning to write through revision process. Designed for U.S.-resident language minority students.

## RWS 280. Academic Reading and Writing (3)

Prerequisite: Score of 6 or below on Writing Placement Assessment (WPA).

Academic prose, emphasizing purposes, structures, and styles of academic writing, with particular emphasis on elements of argument. Designed to improve students' ability to plan, draft, revise, and edit essays, as well as to improve their ability to read and analyze complex academic texts.
RWS 281. Academic Reading and Writing for Second Language Learners and International Students (3)
(Same course as Linguistics 281)
Prerequisite: Open only to students who qualify for Rhetoric and Writing Studies 280 and whose first language is not English.

Academic prose, emphasizing purposes, structures, and styles of academic English writing. Designed to improve students' ability to plan, draft, revise, and edit essays, as well as to read and analyze complex academic texts. Additional emphasis on grammatical features of English relevant to the second language population.

## RWS 290. Business Writing and Rhetoric (3)

Prerequisites: Rhetoric and Writing Studies 100 [or English 100] or 105B, and satisfaction of the SDSU Written Communication Assessment requirement.

Effective writing and rhetoric in business and organizational settings, including letters, memos, and reports. Features organization, drafting, revision, and editing of documents and presentations. (Formerly numbered Business Administration 290 and Information and Decision Systems 290.)
RWS 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## RWS 299. Special Study (3)

Prerequisites: Consent of department chair and instructor. Individual Study.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

RWS 305W. Writing in Various Settings (3)
International students are advised to take Linguistics 305W.
Prerequisites: Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a grade of C (2.0) or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Composing effective texts for a wide range of situations in and out of the university. Learning to adjust textual elements for specific purposes, audiences, and settings. Enhances critical reading and writing skills by exploring how content contributes to meaning and effectiveness.

## RWS 360. Rhetoric of Sustainability (3)

Prerequisite: Completion of the General Education requirements in Communication and Critical Thinking.

Analysis and construction of sustainability texts from a variety of interdisciplinary, popular, and professional contexts. Collaboration through service learning to produce texts related to sustainability.
RWS 390W. Writing in Business Settings (3)
International students are advised to take Linguistics 305W.
Prerequisites: Rhetoric and Writing Studies 290. Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or better (or earned a grade of C (2.0) or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Composing effective texts and presentations for a wide range of audiences, business purposes, genres, and settings. Enhancing critical reading and writing skills by exploring how content contributes to meaning and effectiveness in business documents.

## RWS 392W. Writing for Engineers (3)

Prerequisites: Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher or earned a grade of C (2.0) or better in Rhetoric and Writing Studies 280, 281, or Linguistics 281 if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Composition of presentations and texts for a wide range of engineering audiences, genres, purposes, and settings. Development of critical reading and writing skills by exploring how content contributes to effectiveness and meaning in engineering documents.

## RWS 411. Digital Rhetorics (3)

Prerequisite: Completion of the General Education requirements in Communication and Critical Thinking.

Exploration of digital writing and new media literacies from a rhetorical perspective. Includes research on digital rhetoric and history of literacy to investigate new media literacies, texts, and writing practices.
RWS 412. Issues in Gender and Rhetoric (3)
Prerequisite: Completion of the General Education requirements in Communication and Critical Thinking.

Exploration of the intersection of gender, rhetoric, and power. Past and present theories of gender, technology, and visual rhetoric; historical case studies; rhetorics of contemporary scenes.
RWS 414. Rhetoric in Visual Culture (3)
Prerequisite: Completion of the General Education requirements in Communication and Critical Thinking.

Rhetorical analysis of visual texts in their social, cultural, and political contexts.

## RWS 415. The Craft of Writing Rhetorically (3)

Prerequisite: Satisfaction of the Graduation Writing Assessment Requirement.

Rhetorical development of one's style of writing through study and composition of diverse forms of nonfiction prose.
RWS 496. Topics in Rhetoric and Writing Studies (1-3)
Selected topics. May be repeated once with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## RWS 498. Seminar: Writing and Research (3)

Prerequisite: Senior standing.
Synthesis and application of rhetorical concepts and methods used to produce scholarship in the field of rhetoric and writing studies. Includes three major writing and research projects.

## RWS 499. Directed Study (1-3)

Prerequisites: Consent of instructor and approval of department chair.

Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)

## RWS 500W. Advanced Writing Strategies (3)

Prerequisites: Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a grade of C (2.0) or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Advanced writing course focusing on how meaning is negotiated and claims are argued in academic and public discourse.

## RWS 501. Editing (3)

Prerequisite: Graduate standing or Rhetoric and Writing Studies 200 [or English 200] or 250.

Fundamentals of professional editing. Functions of an editor. Document development, style, and style guides. Editing tools and technologies. Preparing text for publication and production.

## RWS 503W. Professional Writing (3)

Prerequisites: Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a grade of C (2.0) or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Principles and practices of professional writing, including clear and concise style and rhetorical strategies of designing effective workplace documents. Practice composing memos, reports, proposals.

## RWS 504. Advanced Professional Writing (3)

Prerequisite: Rhetoric and Writing Studies 500W, 503W, or graduate standing.

Advanced principles in professional writing, including user and task analysis for interface design; document design and typography; collaboration and interpersonal communication; ethical and cultural issues; usability testing; and small group management.

## RWS 506. Writing Internship (3) $\mathrm{Cr} / \mathrm{NC}$

Prerequisites: Rhetoric and Writing Studies 500W or 503W. Admission to a minor, major, certificate, or graduate program in rhetoric and writing studies.

Intensive experience in writing and editing documents while student is under the joint supervision of an academic instructor and a professional coordinator.

## RWS 507. Professional Communication in Nonprofit

 Organizations (3)Prerequisites: Rhetoric and Writing Studies 200 [or English 200] and 250. Upper division or graduate standing.

Developing specific technical communication skills for nonprofit organizations. Learning nonprofit documentation: proposals, mission statements, advertising, member surveys, capital campaigns. Promoting volunteerism. Interacting with nonprofit boards. Adhering to requisite state and federal regulations.

## RWS 508W. Scientific Writing (3)

Prerequisites: Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a grade of C (2.0) or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Admission to a minor, major, certificate, or graduate program in rhetoric and writing studies. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Scientific writing in academic and empirical research settings to include clear and concise writing style, rhetorical strategies, and writing of research reports, proposals, conference presentations, and articles.
RWS 509. Teaching Composition in Secondary Schools (3)
Prerequisite: Rhetoric and Writing Studies 200 [or English 200] or graduate standing.

Theory and practice of teaching and assessing composition in secondary schools and comparable contexts.

## RWS 510. Rhetoric and Culture (3)

Interplay of rhetoric, writing, and culture, including race/ethnicity, gender, class, and other cultural considerations. Role of texts in shaping and shifting community knowledge, identity, norms, and values.

## RWS 512. Writing Center Practice, Research, and Theory (3)

Prerequisite: Rhetoric and Writing Studies 200 [or English 200] with a grade of $C$ (2.0) or better or satisfaction of Graduation Writing Assessment Requirement.

Practice, research, and theory of coaching writing in various settings. Individual and small group writing projects and research. Maximum credit six units.

## RWS 543. Rhetoric of Visual Composing (3)

Prerequisite: Rhetoric and Writing Studies 250 or graduate standing.

Analyzing, communicating, and organizing complex data, educational content, ideas, and specialized information through multimodal and visual means. Data visualization, shaping content, and usability for diverse audiences and contexts.

## RWS 596. Special Topics in Rhetoric and Writing Studies (1-3)

 Prerequisite: Consent of instructor.Selected topics in rhetoric and writing studies. May be repeated with new content and consent of instructor. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.
RWS 599. Special Study (1-3) Cr/NC
Directed individual study. Maximum credit six units.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

## Russian

In the Department of European Studies
In the College of Arts and Letters

OFFICE: Storm Hall 224A
TELEPHONE: 619-594-5111 / FAX: 619-594-8006
E-MAIL: russian.coord@sdsu.edu
WEBSITE: http://russian.sdsu.edu
Faculty
Emeritus: Shapovalov
Chair: Donadey (Interim)
Lecturer: Shembel

## Offered by the Department of European Studies

Major in Russian with the B.A. degree in liberal arts and sciences.
Teaching major in Russian for the single subject teaching
credential in foreign languages.
Major in European studies, with emphasis in Russian
See European Studies.
Major in Russian and Central European studies.
See European Studies.
Minor in Russian.

## Offered by International Business

Major in international business, with emphasis in Russian.

## The Major

Russian is one of the most widely used languages in the world today. About one-third of all scientific articles are published in Russian. Some of the world's great literature has been produced by Russian writers such as Tolstoy, Chekhov, and Solzhenitsyn. The political impact of the Commonwealth of Independent States is felt internationally. Knowledge of Russian will provide students with a better understanding of one of the world's important and influential countries.

The Russian program offers a wide range of courses, including specialized courses in literature and linguistics. This major is useful preparation for graduate programs in international trade, international law, librarianship, public administration, and journalism. This program requires intensive scholarly investigation and may prepare students for careers in which fluency in Russian is essential.

Knowledge of Russian, particularly when combined with business related courses, is becoming a valuable asset. Many American firms have opened offices in Moscow and St. Petersburg, and the volume of American trade with Russia has been growing at a rapid pace. As a result, there are indications of an expanding interest in Russian graduates by American business organizations with employment possibilities in the United States and Russia. Moreover, students may consider the option of pursuing a double major in another European language.

Other career possibilities include Russian specialists, generally employed by the federal government: high school teachers, librarians, translators, and interpreters.

Russian majors and minors are encouraged to explore the opportunities for study in Russia that are now becoming available.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Impacted Program

The Russian major is an impacted program. To be admitted to the Russian major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Russian Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 11061) (SIMS Code: 116301)
All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 53 units in Russian courses can apply to the degree.

Students majoring in Russian must complete a minor in another field to be approved by the departmental adviser in Russian.

International Experience Requirement. All Russian majors are required to complete a study abroad program in Russia or any other Slavic-language speaking country, consisting of a minimum of six units ( 90 hours). However, all majors are strongly encouraged to complete a more extensive abroad experience by participating in a semester or academic year program. To fulfill the study abroad requirement, Russian majors must enroll in an approved program. Unapproved study abroad programs will not meet the international experience requirement for the major.

Preparation for the Major. Russian 100A, 100B, 110, 200A, 200B. (23 units)

Language Requirement. The language requirement for graduation is automatically fulfilled through coursework for preparation for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 30 upper division units in Russian to include Russian 301, 305A or 305B, 310, 311, 430, 441, 501; and nine units of upper division electives in Russian.

## Russian Major

In preparation for the Single Subject Teaching Credential in Foreign Languages
With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 11061) (SIMS Code: 116303)
All candidates for a teaching credential must complete all requirements as outlined in this section of the catalog under Dual Language and English Learner Education or Teacher Education. For students completing the single subject teaching credential program, no more than 48 units in Russian courses can apply to the degree.

This major may be used by students in dual language and English learner education or teacher education as an undergraduate major for the B.A. degree in liberal arts and sciences. A minor in another field approved by the departmental adviser in Russian is required for the degree.

Preparation for the Major. Russian 100A, 100B, 200A, 200 B. (20 units)

Language Requirement. The language requirement for graduation is automatically fulfilled through coursework for preparation for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 24 upper division units in Russian to include 301, 303, 305A, 305B, 430, 501; and six units in 400- or 500-level courses in Russian.

Proficiency Examination. Before taking a student teaching assignment in Russian, the candidate for the credential may be required to pass an oral and written proficiency examination in the language, administered by the Department of European Studies. The candidate must consult with the chair of the department concerning this examination.

## Russian Minor

## (SIMS Code: 116301)

The minor in Russian consists of a minimum of 22 units to include Russian 110, 200A, 200B, Russian 301 or 311, and six units of upper division Russian courses. Any course taught in English, except Russian 110, needs department approval to apply to the minor requirements.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Language Requirement for the

## B.A. Degree in Liberal Arts and Sciences

Students electing the study of Russian to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Russian 200A or the equivalent level of achievement. The usual sequence of coursework is Russian 100A, 100B, and 200A. Refer to section of catalog on "Graduation Requirements" for additional ways to satisfy competency.

## High School Equivalents

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:

1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

## Courses (RUSSN)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

Native speakers of Russian will not receive credit for taking lower division courses in Russian except with advance approval from the department.

All lower division courses in Russian are taught in Russian unless otherwise stated.

No credit will be given for lower division courses taken after successfully completing any upper division Russian course taught in Russian.

No credit will be given for Russian 100A, 100B, 200A, 200B, 301 taken out of sequence.
RUSSN 100A. Beginning Russian 1 (5) [GE]
Pronunciation, oral practice, reading, essentials of grammar.
RUSSN 100B. Beginning Russian 2 (5) [GE]
Prerequisite: Russian 100A or two years of high school Russian. Continuation of Russian 100A.
RUSSN 110. Slavic Legends and Tales (3) [GE] Introduces fairy tales, folk epics and legends and examines aesthetic, social, and psychological values they reflect. Cultural influence of Slavic folklore in literature, music, painting, film. Taught in English.

RUSSN 200A. Intermediate Russian 1 (5) [GE]
Prerequisite: Russian 100B or three years of high school Russian.
Practical application and review of the basic principles of Russian. Oral practice, reading of cultural material in Russian.

## RUSSN 200B. Intermediate Russian 2 (5) [GE]

Prerequisite: Russian 200A.
Continuation of Russian 200A.
RUSSN 250. Russian Culture in a Digital World (3) [GE]
New media's impact on social, cultural, and political development of Russian society. Russian art, values and ideologies, state power, nationalism, and democracy. Taught in English.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
All upper division courses in Russian are taught in Russian unless otherwise stated.
RUSSN 301. Advanced Grammar and Composition (3) [GE]
Prerequisite: Russian 200B. Proof of completion of prerequisite required: Copy of transcript. Not open to students who graduated from schools where Russian is the primary language of instruction.

Advanced grammar and stylistics; intensive writing practice; reports based on outside reading.
RUSSN 303. Russian for Business Communication (3)
Prerequisite: Russian 301.
Russian business communication to include business letters, reports, presentations. Topics include banking, business etiquette, international trade, marketing.

## RUSSN 305A. Heroes and Villains: Russian Literature of the

 Nineteenth Century (3) [GE]Nineteenth century Russian literature in translation. Prose fiction in cultural and historical context of Russian Empire to include works by Dostoevsky, Pushkin, Tolstoy, Turgenev. Taught in English with readings in English.
RUSSN 305B. Russian Literature of the Twentieth
Century (3) [GE]
Twentieth century Russian literature including works by Zamyatin, Pasternak, Akhmatova, Solzhenitsyn. Taught in English with readings in English.
RUSSN 310. Russian and East European Cinema (3) [GE]
Through study of films from 1950s to post-Soviet times, major concerns of East Europeans are addressed through cinema. Interrelationships among cinematic traditions of Russia, Poland, Hungary, Czechoslovakia, and former Yugoslavia/Balkans. Taught in English.

## RUSSN 311. Russian Through Media (3)

Two lectures and two hours of activity.
Prerequisite: Russian 200B.
Russian stylistics and discourse grammar in context. Emphasis on communicative skills: listening, speaking, reading, and writing. Students work with Internet materials, newspapers, magazines, and excerpts from Russian and Soviet films.

## RUSSN 430. Russian Civilization (3) [GE]

Prerequisites: Russian 200B; upper division standing for majors. Proof of completion of prequisites required: Copy of transcript.

Russian civilization through literary texts, visual art, music, and film. Relationships between art and politics, art and national identity, art of the fantastic and doublespeak, art of postcommunism and postmodernism.
RUSSN 435. Russian and East European Jewish
Culture (3) [GE]
Prerequisite: Upper division standing for majors.
Russian and East European Jewish culture from 1900s to present. How literature written in Russian, Polish, Czech, Lithuanian, German by writers of Jewish origin as well as visual arts and cinema reflect changing problem of Jewish national identity. Taught in English.

## RUSSN 441. Structure of Modern Russian (3)

Two lectures and two hours of activity.
Prerequisite: Russian 301.
Linguistic structure of current standard Russian. Topics include Russian phonology, phonetics and intonation, verbal and nominal morphology, syntax.

## RUSSN 495. Russian Internship (3) Cr/NC

Prerequisites: Upper division standing in major and consent of instructor.

Practical work experience in a field related to Russian studies. Work done under joint direction of activity sponsor and instructor. Approved international internships may count towards international experience requirement for major.

## RUSSN 499. Special Study (1-3)

Prerequisites: Fifteen upper division units in the major with an average of $B(3.0)$ or better and consent of instructor. Proof of completion of prerequisites required: Copy of transcript.

Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
RUSSN 501. Translation (3)
Prerequisite: Russian 301.
Comparison of Russian and English through translation of a variety of texts from Russian to English and from English to Russian.
RUSSN 570. Issues in Russian Literary and Cultural Studies (3) Prerequisites: Russian 301 and 305A or 305B.
Themes within literary, intellectual, and cultural movements in Russian literature of the nineteenth to twenty-first centuries. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

## RUSSN 596. Topics in Russian Studies (3)

Prerequisite: Russian 305B (for literary topics). Proof of completion of prerequisite required: Copy of transcript.

Topics in Russian language, literature, or linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

## Refer to the Graduate Bulletin.

OFFICE: College of Sciences Dean's Office Geology / Mathematics / Computer Science 604
TELEPHONE: 619-594-5142 / FAX: 619-594-6381
WEBSITE: http://www.sci.sdsu.edu/cos

## Faculty

Faculty assigned to teach College of Sciences courses (SCI) are drawn from departments within the college.

## Courses (SCl)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

SCI 101. Seminar: Introduction to the College of Sciences (1) Cr/NC
Advising, careers, departments, fields of study, high impact practices, and skills for success. Connect with administrators, advisers, faculty, students, and other members of the College of Sciences community.

## SCI 200. Introduction to Campus Activities and Networking (1) $\mathrm{Cr} / \mathrm{NC}$

Provides upper class mentors for freshman and community college transfer students. Mentors assist students in locating campus resources, linking them with departmental advisers, identifying tutors in science courses and encouraging students to participate in workshops. Maximum credit two units.
SCI 250. Informal Learning and Instruction of Mathematics and Science (3) [GE]
(Same course as Teacher Education 250)
Two lectures and two or more hours of activity.
Theories of learning and instruction through the lens of informal mathematics and science activities. Qualitative research skills while working in after school mathematics and science programs. Design and Implementation of informal education in a service-learning environment.

## SCI 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)

## SCI 350. International Experience (1-3)

Prerequisite: Upper division standing.
Study abroad experience. See Class Schedule for specific content and geographic location. May be repeated with new content and approval of major adviser. Maximum credit three units applicable to a bachelor's degree.

## SCI 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)

## SCI 510. Careers in the Sciences (1) $\mathbf{C r} / \mathrm{NC}$

Prerequisite: Upper division or graduate standing.
Science career opportunities in biotechnology, diagnostic, informatics, and high technology industries.

## SCI 596. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## Social Science

In the College of Arts and Letters

OFFICE: Nasatir Hall 122
TELEPHONE: 619-594-4289
E-MAIL: socsciad@sdsu.edu
WEBSITE: https://socialscience.sdsu.edu/
Program Director and Undergraduate Adviser:
Brian E. Adams, Ph.D. (Political Science)
Committee: Dominguez (Chicana and Chicano Studies), McCall, M.A. (Sociology), McCall, M.M. (Arts and Letters and Political Science), Wiese (History)

## Offered by Social Science

Major in social science with the B.A. degree in liberal arts and sciences.
Teaching major in social science in preparation for the single subject teaching credential. Emphasis in integrated teacher education program (ITEP-SS).

## The Major

Social science is a multidisciplinary program, encompassing courses in 12 departments-Africana Studies, American Indian Studies, Anthropology, Chicana and Chicano Studies, Economics, Geography, History, Political Science, Psychology, Religious Studies, Sociology, and Women's Studies. Social science research attempts to understand how society works through behavioral or social explanations. Social science students learn to analyze and critically examine cultural, economic, political, and social phenomena by studying human behavior and social processes.

The major provides students with a broad understanding of social science and an appreciation of the interrelatedness of its disciplines. The general social science major is not vocational training, and thus there is no specific career path. This program is appropriate for students who desire a liberal arts education and seek to develop analytical, critical thinking, and writing skills that can be applied to a wide range of occupations and professions. Because of the flexibility of the major, students can take courses that are relevant to their career interests.

The social science major in preparation for the single subject teaching credential is designed for students who want to pursue a career teaching economics, geography, government, or history in middle and high schools. Students take core courses in each of the four areas to provide a breadth of knowledge, as well as electives to build depth. The major also includes the required early field experience necessary to enter SDSU's teaching credential program. Students who choose this major will acquire the content knowledge necessary to successfully complete a teaching credential program and then be able to teach in California middle and high schools.

## Impacted Programs

The social science major, emphases, and social science major in preparation for the single subject teaching credential are impacted programs. Students must enter the university under the designated major code for selected programs. To be admitted to the selected program, refer to the program description for specific impacted criteria.

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser in order to declare or change the major.

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Social Science Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 22011) (SIMS Code: 116701)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A minor is not required with this major.
Impacted Program. The social science major is an impacted program. To be admitted to the social science major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major. Three units of statistics selected from Economics 201, Linguistics 270, Political Science 201, Psychology 280 , Sociology 201, or Statistics 119 or 250 . A six-unit sequence in each of three of the following departments selected from: (1) Anthropology 101, 102; (2) Chicana and Chicano Studies 120A-120B; (3) Economics 101, 102; (4) Geography 101, 102; (5) History 105, 106; 109, 110; (6) Political Science 101, 102, 103; (7) Sociology 101, 102. Statistics courses taken in a social science department may not be used in fulfillment of that department's six-unit sequence. (21-22 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements." Spanish is recommended for those planning to work in this part of the United States.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 33 upper division units to include a 15-unit specialization in one department and the remaining 18 units from among three additional departments. Students may specialize in anthropology, economics, geography, history, political science, sociology, or, under certain conditions listed below, Chicana and Chicano studies. The remaining 18 units must be taken from three separate departments other than the department of specialization. Students who specialize in anthropology, economics, geography, history, political science or sociology may take a maximum of six units in Africana studies or American Indian studies or Chicana and Chicano studies or psychology or religious studies or women's studies from courses listed below.

Students specializing in Chicana and Chicano studies must select courses from Chicana and Chicano Studies 301, 303, 320, 350A-350B, 480 and take the remaining 18 upper division units in anthropology, economics, geography, history, political science, or sociology.

Only students with a specialization in anthropology, economics, geography, history, political science or sociology may take a maximum of six units in the major from Africana studies or American Indian studies or Chicana and Chicano studies or psychology or religious studies or women's studies. These six units can only be selected from the following courses (additional prerequisites may apply):

Africana Studies 321, 322, 421, 422, 471.
American Indian Studies 320, 331 [or Political Science 331], 440, 451 [or Anthropology 451], 480.

Chicana and Chicano Studies 301, 303, 320, 350A-350B, 480.
Psychology 320, 321, 340, 350, 351, 355, 452.
Religious Studies 301, 305, 328, 339, 345, 353, 363.
Women's Studies 310, 325, 340, 341A-341B, 375, 382, 530, 535, 536, 572.

## Social Science Major

In preparation for the Single Subject Teaching Credential with the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 22011) (SIMS Code: 116703)

All candidates for a teaching credential must take and pass the CSET and complete all requirements as outlined in this section of the catalog under Dual Language and English Learner Education or Teacher Education.

This major may be used by students in dual language and English learner education or teacher education or as undergraduate for the B.A. degree in liberal arts and sciences.

Impacted Program. The social science major in preparation for the single subject teaching credential is designated as an impacted program. To be admitted to the major, students must meet the following criteria:
a. Complete with a grade of $C(2.0)$ or better: Economics 101, 102; Geography 102; History 100, 101, 109, 110; Political Science 102; Religious Studies 101. These courses cannot be taken for credit/no credit (Cr/NC);
b. Complete a minimum of 60 transferable semester units;
c. Have a cumulative GPA of 2.50 or better.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the Major. Economics 101, 102; Geography 102; History 100, 101, 109, 110; Political Science 102, Religious Studies 101. (27 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$. The minimum grade in each class is C (2.0) or better.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements." Spanish is recommended for those planning to work in this part of the United States.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 42 upper division units to include: Teacher Education 362* (must be taken upon entering the major).
United States and California History: History 410, 445, and three units selected from any 500-level United States history course.
American Government and Politics: Three units selected from Political Science 305, 320, 321, 334 [or Sustainability 334], 347A, 347B, 348, 422, 436.
United States Geography: Geography 321.
Ethnic and Women's Studies: Six units from two departments selected from Africana Studies 321, 322, 421, 422, 471, American Indian Studies 320, 331 [or Political Science 331], 440, 451, 480, Chicana and Chicano Studies 301, 350B, 375, History 422 [or Asian Studies 422], Women's Studies 310, 331, 341B, 375, 382, 535.

World History: Twelve units distributed as follows: Three units selected from any 500-level history course in an area other than U.S. history. History 412 and six additional units selected from two of the following areas (500-level history courses selected from any of the two required areas below cannot be used to satisfy both the area requirement and the above three unit requirement): Asia: History 420, 421 [or Asian Studies 421], 566, 567, 570.
Europe: History 407, 408, 418, 436, 440, 486, 488, 502, 503, 504 [or Humanities 504], 505, 506 [or Humanities 506], 508, 509; Women's Studies 340.
Latin America: Chicana and Chicano Studies 350A; History 415 [or Latin American Studies 415], 416, 550, 551, 558, 580.
Middle East: History 473, 474, 574.
International Politics: Three units selected from International Security and Conflict Resolution 300; Political Science 356, 359, 362, 363, 364, 366 [or Latin American Studies 366], 375, 380, 479. Economics: Three units selected from Economics 330, 338, 349, 382, 456, 490.
*Contact adviser for specified section.

## Emphasis in Integrated Teacher Education Program (ITEP-SS)

(SIMS Code: 116704)
This emphasis is designed to combine the degree and credential into a four-year Integrated Teacher Education Program. The program is designed to qualify the student for a social science degree and a preliminary single subject teaching credential in social science. A minor is not required with this major.
Impacted Program. The social science major in preparation for the emphasis in integrated teacher education program (ITEP-SS) is designated as an impacted program. To be admitted to the major, students must meet the following criteria:
a. Complete with a grade of C (2.0) or better: Economics 101, 102; Geography 102; History 100, 101, 109, 110; Political Science 102; Teacher Education 170 [or Child and Family Development 170], 211A or 211B, 280. These courses cannot be taken for credit/no credit (Cr/NC);
b. Complete a minimum of 60 transferable semester units;
c. Have a cumulative GPA of 2.67 or better.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

Preparation for the major. Economics 101, 102; Geography 102; History 100, 101, 109, 110; Political Science 102; Teacher Education 170 [or Child and Family Development 170], 211A or 211B, 280. (29 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$. The minimum grade in each class is C (2.0) or better.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements." Spanish is recommended for those planning to work in this part of the United States.

Graduation Writing Assessment Requirement. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above before taking Teacher Education 405W* and earn a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include:
a. History 410 (3 units).
b. History 412 (3 units).
c. History 445 (3 units).
d. United States History: Any 500-level U.S. history course (3 units).
e. American Government and Politics. Three units selected from Political Science 305, 320, 321, 334 [or Sustainability 334], 347A, 347B, 348, 422, 436.
f. Geography 321 (3 units).
g. World History. Three units selected from: History 407, 408, 415 [or Latin American Studies 415], 416, 418, 420, 421 [or Asian Studies 421], 440, 473, 474, 486, 502, 503, 504 [or Humanities 504], 505, 506 [or Humanities 506], 508, 550, 551.
h. Any 500-level world history course (3 units).
i. Global Perspectives. Three units selected from Chicana and Chicano Studies 340A; History 488, 509, 553 [or Latin American Studies 553], 558, 566, 567, 570, 574, 580; International Security and Conflict Resolutions 300; Political Science 356, 359, 362, 363, 364, 366 [or Latin American Studies 366], 375, 380; Women's Studies 310, 331, 340.
j. Perspectives on American History. Three units selected from Africana Studies 422, 471; American Indian Studies 440, 480; Chicana and Chicano Studies 340B, 350A, 350B, 375; History 422 [or Asian Studies 422], 425 [or Asian Studies 425], 533, 534, 535, 536, 548 [or Chicana and Chicano Studies 548]; Women's Studies 341A, 341B.
k. Economics. Three units selected from Economics 330, 338, 349, 382, 456, 490.
I. Graduation Writing Assessment Requirement: Teacher Education 405W.*

Additional Requirements for Subject Matter Preparation Certification. Certification of subject matter competency offered by social science requires completion of all preparation for the major and major courses with at most one course with a C- or lower among courses listed under preparation for the major, and at most one course with a C- or lower among courses listed under the major. If a course is repeated, the highest grade will count. Certification must be achieved before student teaching.

ITEP Admission Requirements. Students apply for admission to the Integrated Teacher Education Program during the spring of their sophomore year. Students who qualify for admission to the Integrated Teacher Education Program in social science the summer prior to their junior year must have a GPA of 2.67 or better, passing scores on the CBEST, a documented field experience, and complete program application.

Credential Requirements (32 units). Education 484, 970 (1 unit); Special Education 450; Teacher Education 303 (3 units), 903 (1 unit), 914C, 924C (3 units), 933, 954 (3 units), 963 (9 units).

[^18]
## OFFICE: Hepner Hall 119

TELEPHONE: 619-594-6865
Accredited by the Council on Social Work Education.

## Faculty

Emeritus: Ajemian, Archuletta, Baily, Butler, Carrilio, Davis, Dean, DeGennaro, Finnegan, Griffin, Guidry, Harbert, Harris, Haworth, Hohman, Hughes, Ishikawa, Jones, Kahn, Kelley, Landsverk, Mathiesen, Packard, Raymer, Reilly, Shillington, Siman, Stanford, Sucato, Valle, Woodruff

## Director: Min

Associate Director: Fuentes
Professors: Engstrom, Garrett, Min, Reed, Zuñiga
Associate Professors: Ko, Li, Pitpitan, Rasmussen
Assistant Professors: Ciro, Nedjat-Haiem, Urada, Villagrana
Lecturers: Barragan, Cosio, Fuentes, Lee, Siegel

## Offered by the School

Doctor of Philosophy degree in interdisciplinary research on substance use.
Master of Social Work degree.
Master of Social Work and Juris Doctor degrees (concurrent program).
Master of Social Work and Master of Public Health degrees (concurrent program).
Major in social work with the B.A. degree
in liberal arts and sciences.
Minor in social work.
Certificate in social work administration
(refer to the Graduate Bulletin).

## The Major

The profession of social work is deeply committed to the relief of human distress and inequality, and to the assistance of people in the meeting of their social, psychological, and economic needs. The social work major prepares graduates who function effectively as entry-level professionals in beginning social work practice with client systems of various sizes and types; who demonstrate sensitivity to the diverse racial, ethnic, and cultural mix of the Southern California border region and are able to work effectively in a variety of roles in a range of agencies to meet the needs of the region's varied communities; who understand and use social work values and ethics throughout their professional practice; who can identify, evaluate and apply existing research evidence to guide their practice decision-making; who understand the contexts and purposes of social work practice, the changing nature of those contexts, and the nature and the dynamics of organizational behavior; and who are committed to lifelong professional growth and learning.

The social work major is designed to apply to a wide variety of social work practice settings. Preparatory coursework for the major includes a basis in the liberal arts and sciences. The upper division curriculum is intensive, encompassing coursework in cultural pluralism, human behavior, social policy, social work practice, and social work research. Required field experience is an integral part of the program.

The B.A. degree prepares students for immediate employment in those social work positions which do not require graduate level preparation, as well as providing the foundation for graduate study.

## Retention Policy

The College of Health and Human Services expects that all social work majors will make reasonable academic progress towards the degree. Social work premajors who have completed major preparatory courses, earned 60 units, but have less than a 2.70 GPA may be removed from the premajor and placed in undeclared.

## Impacted Program

The social work major is an impacted program. To be admitted to the social work major, students must meet the following criteria:
a. Complete 21 to 23 units with a minimum GPA of 2.50 and a grade of $C$ (2.0) or better: Social Work 110, 120; Biology 100, 101, 204, or 261; Economics 101 or 102; Psychology 101; Sociology 101; Psychology 280 or Sociology 201 or Statistics 250. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Complete a minimum of 60 transferable semester units;
c. Have a cumulative GPA of 2.70 or better;
d. To be admitted to the specialization in community corrections case management, students must, in addition to satisfying the criteria above, be a declared social work major, have an overall GPA of 3.0 or better, be able to pass a background check, and submit an approved application to the undergraduate coordinator.
To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Social Work Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 21041) (SIMS Code: 558201)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog entitled "Graduation Requirements." No more than 50 units in social work courses can apply to the degree.

A minor is not required with this major.
Preparation for the Major. Social Work 110, 120; Biology 100, 101, 204, or 261; Economics 101 or 102; Psychology 101; Sociology 101; Psychology 280 or Sociology 201 or Statistics 250. (21-23 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$. The minimum grade in each class is $C$ (2.0) or better. Complete all courses in preparation for the major with a minimum GPA of 2.50.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of $C(2.0)$ or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. All social work majors are required to participate in a pre-approved international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course will be substituted). Specific details can be found on the college website at http://www.chhs.sdsu.edu/international.

To meet the international experience requirement, majors must complete one of the following:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;

OR
5. One course selected from:

- Health and Human Services 290 or 350;
- Asian Studies 490;
- Education 450;
- General Studies 450;
- International Security and Conflict Resolution 450;
- Latin American Studies 320, 450, or 550;
- Political Science 450;
- Public Health 550;
- Science 350.

Major. A minimum of 44 upper division units, in a prescribed course sequence, to include Social Work 350, 360, 361, 370, 381, 382, 391, 483A-483B, 489A (4 units), 489B (4 units), and nine units of approved upper division electives in social work (three units may be taken from the list of approved electives outside the School of Social Work, or six units may be taken from the list of approved electives outside the School of Social Work to include Gerontology 520).

Time Limitation. All social work courses taken for the major must have been taken and completed within seven years of the granting of the undergraduate degree. Courses taken prior to the seven year rule must be repeated. This policy applies to courses taken at SDSU or transferred from another four-year college or university or appropriate courses from a community college. No exceptions will be made to this policy.

Life Experience. No social work premajor or major courses can be waived or credit given towards the undergraduate degree for life experience including but not limited to employment, time spent in the military, training or workshops or volunteer experiences.

Transfer Credit. Transfer credit students may transfer 15 nonsocial work courses in the premajor and six units of Social Work 110 and 120 from a California community college or four year institution with a signed articulation agreement with SDSU. Students from outside the state must have transcripts evaluated to determine if their courses meet SDSU criteria to be accepted for the premajor. The 44 units in the major can only be transferred from a Council on Social Work Education (CSWE) accredited or candidacy status social work undergraduate program.

Prescribed Course Sequence. Students must complete all 300level social work courses ( 21 units) before they will be allowed to enroll in Social Work 483A and 489A. There is no required order of the 300-level courses with the exception that Social Work 382 must be taken prior to Social Work 381.

## Junior Year (21 units) Senior Year (23 units)

SWORK 350 SWORK 360 SWORK 483A SWORK 483B SWORK 370 SWORK 361 SWORK 489A SWORK 489B SWORK 382 SWORK 381 Three Electives

## SWORK 391

Field Practicum. All students must enroll in field practicum. This is a 16 -hour per week internship at a School of Social Work arranged and supervised social work community agency (students are not permitted to locate their own agencies). Students begin field practicum during the fall semester only and must concurrently enroll in Social Work 483A and 489A. The continuation of field practicum is offered in spring semester only when students must concurrently enroll in Social Work 483B and 489B. These courses are sequential and students must complete both " $A$ " courses before going on to the two " $B$ " courses. During the spring semester, preceding enrollment in field practicum, students attend a field orientation meeting. Specific date and time of the orientation is posted on the field bulletin board outside Hepner Hall 119 and announced in class. In addition, students should read the appropriate section in the current student handbook. The section outlines all requirements and processes the
student is expected to follow. The coordinator of field instruction evaluates each application to determine whether the student has met all requirements for admission to field practicum (Social Work GPA of 2.00 and senior status) and assigns the student to an agency for internship. Students who do not file a field application by the deadline date will not be able to enter field practicum. Specific times and days of field practicum are arranged between the student and the assigned agency, but most agencies require daytime availability. Evening and weekend placements are not available. Students should arrange their schedules appropriately to meet these criteria.

## Specialization in Community Corrections Case Management <br> (SIMS Code: 558202)

With the increased emphasis on rehabilitation in criminal justice work, this specialization prepares social work students to provide case management and other services in community corrections settings including probation, corrections, and re-entry programs. To be admitted to the specialization in community corrections case management, students must be a declared social work major, have an overall GPA of 3.0 or better, be able to pass a background check, and submit an approved application to the undergraduate coordinator, in addition to satisfying the criteria above.

Requirements for specialization. A minimum of nine units in the criminal justice major in lieu of social work electives. Required courses are Criminal Justice 300 and two of the following: Africana Studies 380, Criminal Justice 321, 330, 531, 543, or 596 (with approval of adviser).

## Specialization in Environmental Social Work and Community Engagement <br> (SIMS Code: 558214)

Community organizing, eco-social work, sustainability, and sustainable development are emerging areas of practice for social workers. This specialization prepares students for macro practice work in communities with a focus on the environment, environmental justice, and the utilization of resources.

To be admitted to the specialization in environmental social work and community engagement, students must be a declared social work major, have an overall GPA of 3.0 or better, and submit an approved application to the undergraduate coordinator.

Requirements for specialization. A minimum of nine units in lieu of social work electives. Social Work 558 and two of the following: Anthropology 353 [or Sustainability 353], History 441, Philosophy 332 [or Sustainability 332], or Political Science 334 [or Sustainability 334]. Students in this specialization will also be assigned to a community-based agency involved in environmental work for their social work field practicum in the major.

## Student Handbook

The School of Social Work has a student handbook for undergraduate majors. The handbook contains policies and procedures not specified in the catalog in addition to information to aid students in completing the social work major. Student handbooks are available online at the school's website.

## Social Work Minor

## (SIMS Code: 558201)

The minor in social work consists of 24 units to include Psychology 101, Sociology 101, Social Work 110,120, 350, 360, 370, and three units selected from Social Work 400, 410, 430, 496, or Gerontology 520.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Courses (SWORK)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

SWORK 110. Social Work Fields of Service (3)
Fields of services in which social workers perform professional roles. Focus on social work approach to intervention in practice and policy arenas.
SWORK 120. Introduction to Social Work and Social Welfare (3)
Two lectures and three hours of fieldwork.
Orientation to field of social work. Develop understanding of social work principles, goals, values, and methods through readings and class discussion. An unpaid assignment in an agency setting is required. Scheduling is flexible.
SWORK 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

SWORK 350. Cultural Pluralism (3) [GE]
Understanding of the American society as a culturally pluralistic social process and an understanding of social work as a culturally directed profession with emphasis on the concept of cultural identities created by one's values, ideologies, knowledge and behavior.
SWORK 360. Perspectives on Human Behavior and the Social
Environment (3) [GE]
Interdisciplinary, comparative, and critical approach to explanatory theories of human behavior. Focus on interrelatedness of factors that affect the nature and quality of human life with linkage to the social welfare of individuals, families and communities.
SWORK 361. Human Behavior Across the Life Span (3)
Prerequisites: Social work major and junior standing.
Psycho-social, biological, cultural and environmental influences on individual growth and development and how knowledge is utilized by social work generalist practitioners in assessment and intervention.
SWORK 370. Social Policies and Social Issues (3)
Prerequisites: Social Work 110 and 120.
Major social forces and institutions as they relate to and determine social policy emphasizing social welfare services in an industrialized society.

## SWORK 381. Practice Skills Micro (3)

Prerequisites: Completion of social work or gerontology preparation for the major. Social Work 382 or consent of instructor.

Micro skills utilizing motivational interviewing within overall generalist practice framework. Written and verbal communication, interviewing, and assessment with individuals.
SWORK 382. Practice Skills Macro (3)
Prerequisite: Completion of social work preparation for the major.
Development of social work practice skills at macro level. Written and verbal communication needs assessment and resource development with organizations and communities.

## SWORK 391. Methods of Social Work Research (3)

Definition and purpose of research in social welfare and social work. Formulation of research problems, selecting a design and methodology; techniques of collecting, organizing, interpreting, and analyzing data.

## SWORK 400. Social Work Practice: Child Welfare (3)

Prerequisite: Social Work 370.
Problems of children and supportive, supplementary and substitute social services which have been developed to meet these needs.

SWORK 410. Social Work Practice: Family Issues (3)
Prerequisite: Social Work 370.
Issues relative to social work intervention with families, including major social work and interpersonal family problem situations. Family practice methods and social service provisions, and social policy issues around family needs.
SWORK 430. Alcohol and Other Drug Problems: Prevention and Intervention (3)
Prerequisite: Upper division standing.
Alcohol and other drug issues related to individuals, groups, and society. Concepts include preventive methods, secondary prevention, self-help groups, models of treatment, prevention strategies in communities, and overview of alcohol and drug policies.

## SWORK 483A. Generalist Social Work Practice I (3)

Prerequisites: Completion of social work preparation for the major, 300-level courses required for major, and concurrent registration in Social Work 489A.

Integration of social work theory, principles, and practice techniques across micro and mezzo social work populations to include families and groups.
SWORK 483B. Generalist Social Work Practice II (3)
Prerequisites: Social Work 483A, 489A, and concurrent registration in Social Work 489B.

Integration of social work theory, principles, and practices with emphasis on mezzo and macro generalist practice social work populations and settings.

## SWORK 489A-489B. Field Experience in Social

Work (4-8, 4-8) Cr/NC
Prerequisites: Completion of all 300-level social work courses; Social Work 381 and 382 with a grade of C (2.0) or better and consent of instructor; arrangements made during prior semester with director of undergraduate field education. Concurrent registration in Social Work 483A for students taking 489A and Social Work 483B for students taking 489B.

A minimum of eight units (four in Social Work 489A and four in Social Work 489B) is required. Students spend 16 hours per week per semester in practice field assignments in selected social work agencies or settings.

## SWORK 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## SWORK 497. Investigation and Report (3)

Prerequisite: Consent of instructor.
Analysis of special topics in social welfare.

## SWORK 499. Special Study (1-3) Cr/NC

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

SWORK 558. Seminar in Community Organization and Problem Solving (3)
Prerequisite: Credit or concurrent registration in Social Work 489A, 489B, or 650.

Community change, consensus organizing model, environmental social work, problem solving, and strategies for serving socioeconomically under-served communities for future community organizers and human services administrators.

## SWORK 596. Experimental Topics (1-4)

Selected topics in social work. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.

## Sociology

In the College of Arts and Letters

OFFICE: Nasatir Hall 224
TELEPHONE: 619-594-4826 / FAX: 619-594-1325
E-MAIL: sociology@sdsu.edu
WEBSITE: http://sociology.sdsu.edu
Faculty
Emeritus: Bloomberg, Buck, Chandler, Cottrell, El-Assal, Emerick, Gay, Gillette, Hohm, Ima, Kolody, Preston, Sandlin, Scheck,
Schulze, Stephenson, Winslow, Zhang

## Chair: Kim

Professors: Esbenshade, Johnston, Liu, Ojeda, Roberts
Associate Professors: Choi, Gibbons, Kim, Marcelli, McCall, Robb Larkins
Assistant Professors: Beck, Brown

## Offered by the Department

Master of Arts degree in sociology.
Master of Science degree in criminal justice and criminology. (Jointly with the College of Professional Studies and Fine Arts.)
Major in sociology with the B.A. degree
in liberal arts and sciences.
Minor in sociology.

## The Major

Sociology is the study of human social behavior. Among other things, it includes the study of intimate personal relationships to large-scale social institutions which constitute societies and world systems; the shared cultural beliefs which hold societies together and make life meaningful; the cleavages of class, ethnicity, gender, and race, and the inequalities and conflicts associated with them; and the causes and consequences of crime and other forms of social deviance.

While the sociology department offers a wide variety of courses, the focus of its curriculum is community issues. Communities consist of networks of personal relationships that underlie the large scale organizational and institutional structures that constitute societies. These social ties constitute the power resources or "social capital" - through which things get done. They provide a kind of interpersonal glue that creates social cohesion and enables people within organizations and institutions to form coalitions, initiate processes for social change, and consolidate power resources in seeking to change social structure.

A bachelor's degree in sociology provides an excellent liberal arts foundation for embarking on a wide range of career paths. A major in sociology provides the graduate with the skills necessary to work effectively with groups of people. Some possible areas of employment are public and private agencies, college settings, publishing, businesses, research facilities, human resources, human services, corrections, local/state/federal governments, health facilities. The degree also prepares students to enter graduate programs in sociology, law, public health, and teaching, to name a few.

## Impacted Program

The sociology major is an impacted program. To be admitted to the sociology major, students must meet the following criteria:
a. Complete with a grade of C (2.0) or better: Sociology 101, 102, and 201. (9 units) NOTE: Statistics 119 or 250 , or Biology 215, will be accepted in lieu of Sociology 201. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Have a cumulative GPA of 2.50 or better.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Sociology Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 22081) (SIMS Code: 116901)
All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in sociology courses can apply to the degree.

A minor is not required with this major.
Preparation for the Major. Sociology 101, 102, and 201. (9 units) NOTE: Statistics 119 or 250 , or Biology 215 will be accepted in lieu of Sociology 201.

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$. The minimum grade in each class is $C(2.0)$ or better.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. Complete 18 units of core requirements listed below and 12 units of upper division sociology electives. (30 units)

Core requirements ( 18 units) should be completed before upper division sociology electives ( 12 units):

Sociology 301
Sociology 401
Sociology 403
Sociology 406 or 407 or 408
Sociology 433 or 455
Sociology 457 or 458 or 459

## Sociology Minor

(SIMS Code: 116901)
The minor in sociology consists of a minimum of 18 units to include Sociology 101 and either 102, 201, or 301; three units selected from Sociology 401, 403, 406, 407, 408, 433, 455, 457, 458 , or 459; and nine elective units from other upper division courses in the department. NOTE: Statistics 119 or 250, or Biology 215 will be accepted in lieu of Sociology 201.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Sociology Honors Thesis

The Department of Sociology offers undergraduates of superior achievement the opportunity to write a sociology honors thesis leading to special recognition upon graduation. Interested students should consult with the undergraduate adviser in the Sociology Department.

## Courses (SOC)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

SOC 101. Introductory Sociology: The Study of Society (3) [GE]
This course is prerequisite to all upper division courses in sociology. Major ideas, concepts, and methods in the study of society to include socialization, culture, social structure, social stratification, deviance, social control, and social change.

## SOC 102. Introduction to Social Problems (3) [GE]

Contemporary social problems. Topics may include poverty, inequality, unemployment, crime and deviance, population and ecological problems, health, family issues, and the role of ideology and interest groups in the definition of social problems.

## SOC 115. Body and Society (3) [GE]

Relationship between the body and society and the body as a product of complex social arrangements, interactions, and processes. The body and aging, consumer culture, dying, health, inequalities, life course, and as an object of social control and regulation.

## SOC 201. Elementary Social Statistics (3) [GE]

Basic statistical techniques in sociology. Tables and graphs, measures of central tendency and variability, correlations, cross-classification, and introduction to multivariate analysis, sampling and statistical inference. Computer applications may be included. Students with credit or concurrent registration in the following lower division statistics courses will be awarded a total of four units for the two (or more) courses: Sociology 201; Administration, Rehabilitation and Postsecondary Education 201; Biology 215; Civil Engineering 160; Economics 201; Linguistics 270; Political Science 201; Psychology 280; Statistics 119, 250.
SOC 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)

## SOC 301. Social Research Methods (3)

Prerequisites: Sociology 201 and Sociology 101 or 102.
Methods in sociological research to include surveys, field experiments, observations, ethnography, comparative, historical, and content analysis. Methods are linked to sociological theory.
SOC 320. Sex and Gender in Contemporary Society (3) [GE] Prerequisite: Sociology 101.
Ways femininity and masculinity are constructed through social arrangements associated with interpersonal relations, family, education, occupations, and economic and political systems. How gender relations are portrayed in mass media and how they are accomplished in community life.

## SOC 330. Culture and History of Surfing (3) [GE]

Prerequisite: Sociology 101 with a grade of C (2.0) or better.
Surfing from Hawaiian origins to present. Class, gender, and racial intersectionality within surfing communities. Cultural differences between Polynesian and Western societies. Surfing subcultures and dominant cultures. (Formerly numbered Sociology 210.)

## SOC 335. Sociology of Popular Culture (3) [GE]

Prerequisite: Sociology 101.
Forms and features of popular culture. Distinction between highbrow and lowbrow cultures. Sociological theories about effects, functions, and power of popular culture in society and in social change.

SOC 338. Sociology of Religion (3) [GE]
(Same course as Religious Studies 343)
Prerequisite: Sociology 101.
Forms of religious belief, knowledge, practice, and experience tied to different social arrangements and historical periods. Consequences of religion for community and society. Secularization and conversion processes in modern industrial societies.
SOC 350. Population and Contemporary Issues (3) [GE]
Prerequisite: Sociology 201.
Population processes (fertility, mortality, and migration) as they affect and are affected by such contemporary issues as rapid world population growth, environment, urbanization, family, aging, US-Mexico border, and undocumented migration.

## SOC 352. Global Social Problems (3) [GE]

Prerequisite: Sociology 101.
Contemporary social problems from global and transnational perspectives.

## SOC 355. Sociology of Race and Ethnicity (3) [GE]

Prerequisite: Sociology 101.
Historical and comparative analysis of race and ethnic relations. Origins and maintenance of ethnic stratification systems; discrimination and prejudice; the adaptation of communities; role of social movements and government policies in promoting civil rights and social change.

## sOC 401. Classical Social Theory (3)

Prerequisite: Sociology 101.
Classical theories of society. Intellectual history of European and U.S. theoretical developments in functionalism, historical materialism, historicism, positivism, and symbolic interactionism. Theories of modernity and evolution of modern world system.

## SOC 403. Contemporary Social Theory (3)

Prerequisite: Sociology 101.
Contemporary theories of society. Intellectual history of U.S. and European theoretical developments in critical race theory, critical theory, feminist theory, post-structuralism, structural functionalism, and structuralism. Theories of postmodernity and non-Western theories of cultural and economic hegemony.

## SOC 406. Intermediate Social Statistics (3)

Prerequisite: Sociology 301 with a grade of C (2.0) or better.
Statistical techniques in the analysis of social research data and hypothesis testing, including analysis of variance, covariance, partial correlation, multiple and logistic regression, logic and log-linear models, discriminant and factor analysis. Practical application with the use of statistical packages.
SOC 407. Survey and Experimental Research Methods (3)
Prerequisite: Sociology 301 with a grade of $\mathrm{C}(2.0)$ or better.
Research process from research design through data processing, analysis, and interpretation. Quantitative research techniques including universe enumeration, sampling, questionnaire construction, scaling techniques, structured interviews, and experimental designs.

## SOC 408. Qualitative Research Methods (3)

Prerequisites: Sociology 101 and 301 with a grade of $C(2.0)$ or better.

Ethnographic research methods including interviewing, observation, participant observation, and case studies. Problems in research design; gaining and maintaining rapport; analysis, interpretation, and writing with qualitative data.

## SOC 410. Social Psychology: Mind, Self, and Society (3) [GE]

Prerequisite: Sociology 101.
Major theories, problems, and findings concerning the relationship of the individual and society. Topics include consciousness and construction of meaning, self-concept and social identity, socialization and interaction, group behavior and group membership.

## SOC 411. Police and Society in the Americas (3)

Prerequisite: Sociology 101.
Social and cultural factors shaping police work in the United States and Latin America. Policing through lenses of power and social control. Current controversies and innovations to include community policing, immigration, militarization, reform, and securitization.

## SOC 412. Social Construction of Reality (3)

Prerequisite: Sociology 101.
Analysis of reality as an ongoing social process. Creation and internalization of social worlds through language. Common sense and the multiple realities of everyday life. Dynamic emergence of social structure.

## SOC 420. Sexuality in Modern Society (3)

Prerequisite: Sociology 101.
Social construction of sexualities. Sexual behaviors, desires, and practices. Changing norms of sexuality, morality and social control, non-normative sexualities, sexual identities, and social and political movements regarding sexuality.

## SOC 421. American Families (3) [GE]

Prerequisite: Sociology 101.
Changes in intimacy in American family. Selection of mating partners, spousal and parenting relationships, and alternatives to traditional family forms. Changing functions of the family viewed in historical perspective. Present diverse family arrangements and future prospects.

## SOC 430. Social Organization (3) [GE]

Prerequisite: Sociology 101.
Social structure of societies. Historical examination of structure and development of social institutions, communities, and other large scale organizations.

## SOC 433. Wealth, Status, and Power (3)

Prerequisite: Sociology 101.
Social inequality as an institutional process. Patterns of unequal distribution of wealth, power, privilege and prestige, their causes, and impact this has on communities and societies.

## SOC 436. Sociology of Health and Illness (3) [GE]

Prerequisite: Sociology 101.
Social, cultural, and political factors in definitions of health, disease, healing, and provision of services. Comparative study of medical practices and organizational structures in America and selected international settings. Emphasis on change, socialization of practitioners, relationships between health related occupations.

## SOC 441. Sociology of Mental IIIness (3)

Prerequisite: Sociology 101.
Social, cultural, historical, and political factors involved in definition of "madness" and theories of mental illness in various societies. Review of research about incidence, prevalence, and social epidemiology of mental illness, as a community problem, and its distribution by social class, gender, age, geographical region, and country.

## SOC 442. Homicide in America (3)

Prerequisite: Sociology 101.
Characteristics and distribution of murder, including historical and cross-cultural comparisons. Social psychological, structural, cultural and situational explanations of causes and consequences of juvenile, gang, domestic, mass, serial and sexual murders.

## SOC 443. Crime and Society (3)

Prerequisite: Sociology 101.
Social origins, forms, and functions of criminal law. Sociological theories about causes and consequences of crime. Measurement and distribution of violent crimes, property crimes, victimless crimes, white collar crime, and their impact on communities and society.

## SOC 444. Juvenile Delinquency (3)

Prerequisite: Sociology 101.
Sociological theories about causes and consequences of juvenile delinquency. Social origins of juvenile justice system, with attention to methods of control and prevention at community and national levels.

SOC 445. Sociology of Deviance (3)
Prerequisite: Sociology 101.
Conformity and nonconformity; the relationship between individual liberty and social control; stigma and the labeling of deviant behavior such as prostitution, alcoholism, drug addiction, and crime.
SOC 446. Sociology of Criminal Organizations (3)
Prerequisite: Sociology 101.
Major criminal organizations that operate in underworld across time, space, and socio-cultural context, including Mafia, Yakuza, Triads, and transnational drug traffickers and human smugglers. Explore their social organizations, operations, roles, and identities.

## SOC 447. Human Trafficking and Modern Day Slavery:

A Sociological Perspective (3)
Prerequisite: Sociology 101 or 102.
Examine complex phenomena of transporting, harboring, and employing human beings through use of force, fraud, or coercion for labor and sexual exploitation. Analyze root causes of this modern day slavery and explore possible solutions.

## SOC 448. Urban Sociology (3)

Prerequisite: Sociology 101.
Cities and neighborhoods as they pertain to day-to-day life. Location importance for life outcomes and what social forces can shape location.
SOC 450. Social Change (3) [GE]
Prerequisite: Sociology 101.
Social change at the interpersonal, institutional, and societal levels of analysis. Major economic, political, technological, and demographic forces that have shaped the contemporary world. Topics may include modernization, industrialization, urbanization, revolution, and prospects of social change in rich and poor nations.

## SOC 455. Sociology of Intersectionality (3)

Prerequisite: Sociology 101.
Social inequality to include current research on class, gender, and race. Interlocking systems of privilege and oppression and their impact on society.
SOC 457. Protests, Reforms, and Revolutions (3)
Prerequisite: Sociology 101.
Revolutionary and reform movements in relationship to the larger society. Conditions leading to development of social movements, emergence of leadership, ideologies, strategies, recruitment of members, and social consequences; case studies.

## SOC 458. Nonviolence, Peace, and Social Change (3)

Prerequisite: Sociology 101.
Actions, research, strategies, and theories regarding nonviolent social change. Power of collective nonviolent actions through the lenses of global, local, and national conflicts.
SOC 459. The American Labor Movement (3)
Prerequisite: Sociology 101.
Social history of the American labor movement from late eighteenth century to present. Relationship between the labor movement, the labor process, and the state. Race and gender divisions within the labor movement.

## SOC 460. Technology and Society (3) [GE]

Prerequisite: Sociology 101 with a grade of $C$ (2.0) or better.
Social construction of technological systems. Emergent technologies within particular cultural forms, social structures, and political practices, and how these phenomena influence design and use of technology. Technology as a mode of social experience.
SOC 470. Sociology, Research, and Community Engagement (3) Two lectures and two hours of activity.
Prerequisite: Sociology 301 with a grade of $C(2.0)$ or better.
Division of labor in sociology, theories of organizations and social change, labor market trends frame internship experience. Students will be required to complete 45 hours of outside supervised research or internship.

## SOC 480. Field Internship (3-6)

Prerequisite: Sociology 101.
Supervised field placement of students in community agencies. Practical experiences related to studies within the sociology curriculum. Maximum credit six units.

## SOC 496. Experimental Topics (1-4)

Prerequisite: Consent of the instructor.
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## SOC 499. Special Study (1-6)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

SOC 522. The Family in Comparative and Cross-Cultural Perspectives (3)
Prerequisite: Sociology 101. Recommended: Sociology 421.
Comparative study of selected family systems in the past and present. Comparative analysis of major social and demographic changes in marriage and family in post-industrial nations and less developed countries. Cross-cultural comparisons of family arrangements in contemporary America by social classes and racial-ethnic groups.

## SOC 537. Political Sociology (3)

Prerequisite: Sociology 101.
Social organization of political processes. Power and authority, social class, primary groups, collective behavior, social change, and other sociological factors considered in their relationships to political processes.

## SOC 539. Sociology of Education (3)

Prerequisite: Sociology 101.
Social organization of education in the United States and other societies. Structure and functions of educational institutions. Formal and informal education. Class, ethnic, and other social factors affecting the educational process. Implications of educational decision making and testing.
SOC 543. Police, Courts, and Corrections: The Sociology of Crime and Punishment (3)
Prerequisite: Sociology 101.
Historical sociology of the American criminal justice system. Development and functions of police, criminal courts, prisons, parole, and probation. Theories and ideologies of punishment and rehabilitation. Review of contemporary research.

## SOC 554. Sociology of the United States-Mexico Transborder

 Populations and Globalization (3)Prerequisite: Sociology 101.
Sociology of the population at the United States-Mexico border region. Demographic dynamics and social change in border communities. International migration and transmigration. Transborder families and transnational families. Gender systems and women's reproductive health in border communities.
SOC 555. Immigrants and Refugees in Contemporary American Society (3)
Prerequisite: Sociology 101.
Contemporary migration to the United States, especially from Latin America and Asia. Political and economic migration. Immigrant and refugee adaptation. Theoretical controversies, research applications, and policy implications.

SOC 596. Current Topics in Sociology (1-3)
Prerequisite: Sociology 101.
Selected specialized, controversial or currently relevant topics in sociology. Maximum opportunity provided for student initiative in determining course content and procedures. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## SOC 597. Investigation and Report (3)

Prerequisites: Fifteen units in sociology and consent of instructor. Analysis of special topics in sociology. Maximum credit six units.

GRADUATE COURSES
Refer to the Graduate Bulletin.

## Spanish

In the College of Arts and Letters

OFFICE: Arts and Letters 134
TELEPHONE: 619-594-6588 / FAX: 619-594-5293
Faculty
Emeritus: Angelelli, Blanco, Castro (Castillo), Hidalgo, Jiménez-Vera, Kish, O’Brien, Robinson, Segade, Talamantes, Young
Chair: Blanco
Professors: Godoy Marquet, Martín-Flores
Associate Professors: Urzúa Beltrán, Vasconcelos
Assistant Professors: Alamillo Olivas, Ares-López, Beverinotti, Schmidt

## Offered by the Department of Spanish and

Portuguese Languages and Literatures
Master of Arts degree in Spanish.
Major in Spanish with the B.A. degree in liberal arts and sciences.
Teaching major in Spanish for the single subject teaching credential in foreign languages.
Minor in Spanish.
Certificate in Spanish for the professions.
Certificate in Spanish translation and interpretation studies.
Offered by the Department of European Studies
Major in European studies, with emphasis in Spanish.

## Offered by International Business

Major in international business, with emphasis in Spanish.

## The Major

Spanish is the fourth most widely spoken language in the world and the second most frequently used language in the Southwest. Because of San Diego's proximity to Mexico and other Span-ish-speaking countries, many students here are interested in learning Spanish. Their reasons range from practical application in jobs, travel, reading or recreation to a curiosity about the culture or literature of Spanish-speaking countries. The Department of Spanish and Portuguese offers a wide range of courses and programs designed to satisfy the varied needs of students who enter the Spanish major.

## Impacted Programs

The majors in Spanish and Spanish in preparation for the single subject teaching credential are impacted programs. To be admitted to the Spanish major, students must meet the following criteria:
a. Complete with a grade of $C(2.0)$ or better: Spanish 202 and 212 (or 282). These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). These courses are automatically waived for native speakers of Spanish who have a high school diploma or equivalent from a country whose language of instruction is Spanish. International Baccalaureate or Advanced Placement credit for Spanish 202 and 212 will satisfy this requirement;
b. Have a cumulative GPA of 2.3 or better.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Advising

All College of Arts and Letters majors are urged to consult with their department adviser as soon as possible; they are required to meet with their department adviser within the first two semesters after declaration or change of major.

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Spanish Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 11051) (SIMS Code: 117101)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 52 units in Spanish courses can apply to the degree.

A minor is required with this major. Students majoring in Spanish who complete a minor not exceeding 15 units can complete the major within 120 units.

Preparation for the Major. Spanish 101, 102, 201, 202, 211, and 212. Spanish 281 replaces 201 and 211 and Spanish 282 replaces 202 and 212 for U.S. Hispanics. Spanish 202 and 212 (or 282) must be completed with a grade of $C(2.0)$ or better and cannot be taken for credit/no credit $(\mathrm{Cr} / \mathrm{NC})$. These courses are automatically waived for native speakers of Spanish who have a high school diploma or equivalent from a country whose language of instruction is Spanish. See adviser. (0-22 units)

Students completing the California Community College Associate in Arts in Spanish for Transfer (AA-T) will satisfy preparation for the major if Spanish 281 and 282 equivalent courses were completed. If not, Spanish 211 and 212 must be completed at the community college or at SDSU.

Language Requirement. The language requirement for graduation is automatically fulfilled through coursework for preparation for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience Requirement. All Spanish majors are required to complete an approved study abroad program in a Spanish-speaking country consisting of a minimum of six units ( 90 hours). To fulfill the International Experience Requirement, Spanish majors must enroll in a study abroad program approved by the department. Participation in other study abroad programs without the written approval of the department will not meet the international experience requirement for the major.

Major. A minimum of 30 upper division units taught in Spanish to include Spanish $301^{*}, 302^{*}, 350,395,401$ or 402 , and 448 ; Spanish 340 or 341 or 342; and nine units+ selected from 300- to 500-level Spanish courses. At least 15 upper division units for the major must be taken in residence through coursework offered by or sponsored by the SDSU Spanish department or by the CSU International Programs. Students who have successfully completed courses for upper division credit may not receive credit for lower division Spanish language courses.

> *Spanish 381 or 382 replaces Spanish 301 and 302 for Spanish speakers.
> +Twelve units must be taken if Spanish 381 or 382 was taken in place of
> Spanish 301 and 302 .

## Spanish Major

In preparation for the Single Subject Teaching Credential in Foreign Languages

## With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 11051) (SIMS Code: 117103)

All candidates for a teaching credential must take and pass the CSET and complete all requirements as outlined in this section of the catalog under Dual Language and English Learner Education or Teacher Education. For students completing the single subject teaching credential program, no more than 52 units in Spanish courses can apply to the degree.

This major may be used by students in dual language and English learner education or teacher education as preparation for the CSET or as undergraduates for the B.A. degree in Liberal Arts and Sciences.

A minor is required with this major.

Preparation for the Major. Spanish 101, 102, 201, 202, 211, and 212. Spanish 281 replaces 201 and 211 and Spanish 282 replaces 202 and 212 for U.S. Hispanics. Spanish 202 and 212 (or 282) must be completed with a grade of $C(2.0)$ or better and cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). These courses are automatically waived for native speakers of Spanish who have a high school diploma or equivalent from a country whose language of instruction is Spanish. (0-22 units) See Spanish adviser.

Language Requirement. The language requirement for graduation is automatically fulfilled through coursework for preparation for the major.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience Requirement. All Spanish majors are required to complete an approved study abroad program in a Spanish-speaking country consisting of a minimum of six units (90 hours). To fulfill the International Experience Requirement, Spanish majors must enroll in a study abroad program approved by the department. Participation in other study abroad programs without the written approval of the department will not meet the international experience requirement for the major.

Major. A minimum of 30 upper division units taught in Spanish to include Spanish 301*, 302*, 350, 395, 448, 561; Spanish 340 or 341 or 342 ; and nine units+ selected from 300- to 500-level Spanish courses. At least 15 upper division units for the major must be taken in residence through coursework offered by or sponsored by the SDSU Spanish department or by the CSU International Programs. Students who have successfully completed courses for upper division credit may not receive credit for lower division Spanish language courses.

> *Spanish 381 or 382 replaces Spanish 301 and 302 for Spanish speakers.
> +Twelve units must be taken if Spanish 381 or 382 was taken in place of Spanish 301 and 302 .

## Spanish Minor

(SIMS Code: 117101)
The minor in Spanish consists of a minimum of 18-19 units taught in Spanish, at least 12 of which must be in upper division Spanish courses.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. At least six upper division units for the minor must be taken in residence through coursework offered by or sponsored by the SDSU Spanish department or by the CSU International Programs.

## Spanish for the Professions Certificate <br> (SIMS Code: 117151)

The Department of Spanish and Portuguese Languages and Literatures offers a certificate in Spanish for the professions. The program enhances the language skills and cultural competencies for a broad array of professions to include business, education, health, law and criminal justice, and translation and interpretation.

The admission requirement for the certificate is completion of Spanish 301 and 302, or 381, and Spanish 350. After meeting the basic requirements for admission, the student must complete 15 units to include Spanish 307, 408, 409, 410, and 491. All courses in the certificate program must be completed with a grade of $C$ (2.0) or better. Up to nine units in the certificate program may be counted toward the major in Spanish and six units may be counted toward the minor in Spanish.

Contact the certificate adviser in the Department of Spanish and Portuguese for more information.

## Spanish Translation and Interpretation Studies Certificate

(SIMS Code: 117155)

The Department of Spanish and Portuguese Languages and Literatures offers a certificate in translation and interpretation studies. A prospective candidate for the certificate should possess a bilingual facility in Spanish and English. The student must demonstrate writing proficiency in both Spanish and English either by completing with a grade of B(3.0) or better Rhetoric and Writing Studies 305W (or pass the Writing Placement Assessment with a score of 10 or above, and Spanish 301, 302, and 350) or by demonstrating similar written language proficiency prior to starting work on the certificate. The student must complete an interpreting skills admission test with a grade of B (3.0) or better (contact program director). The student may be advised to take Spanish 391 in preparation for the certificate.

After meeting the basic requirements for admission, the student must complete with a GPA of 3.0 or better 15 units to include Spanish 491, 492, 493, 594A, 594B.

Up to nine units in the certificate program may be counted toward the major in Spanish and six units may be counted toward the minor in Spanish.

## Language Requirement for the

## B.A. Degree in Liberal Arts and Sciences

Students electing the study of Spanish to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Spanish 201 or the equivalent level of achievement. The usual sequence of coursework is Spanish 101, 102, and 201. Refer to section of catalog on "Graduation Requirements" for additional ways to satisfy competency.

## High School Equivalents

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:

1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.
Students entering San Diego State University with five or six years of high school Spanish may enroll in Spanish 202; the department recommends, however, that they take Spanish 301.

## Advanced Placement in Spanish*

1. Students scoring a 3 on the Spanish Language Advanced Placement Examination will receive 6 units of academic credit for Spanish 201 and 211. The continuation placement level with this score is Spanish 202 and/or 212. Credit will not be awarded for numbered Spanish courses (101, 102, 281).
2. Students scoring a 4 or 5 on the Spanish Language Advanced Placement Examination will receive 6 units of academic credit for Spanish 202 and 212. The continuation placement level with these scores is Spanish 301 or 381 . Credit will not be awarded for lower division Spanish courses (101, 102, 201, 211, 281 , or 282).
[^19]
## International Baccalaureate

Students with the International Baccalaureate in Spanish will be awarded six units of Spanish equal to credit in Spanish 202 and 212. International Baccalaureate students will not receive duplicate credit for Advanced Placement in Spanish scores nor for enrollment in any lower division Spanish language courses.
Courses (SPAN)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

Native speakers of Spanish will not receive credit for taking lower division courses in Spanish except with advance approval from the department.

All lower division courses in Spanish are taught in Spanish unless otherwise stated.

No credit will be given for lower division Spanish language courses taken after successfully completing any upper division Spanish course.

No credit will be given for Spanish 101, 102, 201, 202, 301 taken out of sequence.
SPAN 101. Introduction to Spanish I (4) [GE]
Four lectures plus laboratory.
Pronunciation, oral practice, readings on Hispanic culture and civilization, essentials of grammar. Not open to students with credit in Spanish 102, 201, 202, 281, 282, 301, or a higher-numbered Spanish course.
SPAN 102. Introduction to Spanish II (4) [GE]
Four lectures plus laboratory.
Prerequisite: Spanish 101 or two years of high school Spanish.
Continuation of Spanish 101. Not open to students with credit in Spanish 201, 202, 281, 282, 301, or a higher-numbered Spanish course.

## SPAN 201. Intermediate Spanish I (4) [GE]

Four lectures plus laboratory.
Prerequisite: Spanish 102 or completion of the third year of high school Spanish.

First course in Spanish at intermediate level. Grammatical structures presented in beginning Spanish. Culture-centered oral and written language emphasized. Not open to students with credit in Spanish 202, 281, 282, 301, or a higher-numbered Spanish course. See enrollment restrictions under AP credit in Spanish. May be taken concurrently with Spanish 211. It is recommended that heritage speakers of Spanish take Spanish 281 in place of Spanish 201 and 211.

## SPAN 202. Intermediate Spanish II (4) [GE]

Prerequisite: Spanish 201 or completion of the fourth year of high school Spanish.

Second course in Spanish at intermediate level. Selected grammatical structures supported by study of cultural materials. Written and spoken Spanish emphasized. Not open to students with credit in Spanish 282, 301, or a higher-numbered Spanish course. See enrollment restrictions under AP credit in Spanish. May be taken concurrently with Spanish 212. It is recommended that heritage speakers of Spanish take Spanish 282 in place of Spanish 202 and 212.

SPAN 211. Intermediate Conversation and Reading (3) [GE] Prerequisite: Spanish 102.
Emphasis on oral communication and reading comprehension through intermediate level cultural materials. Some writing will be adjunct to reading. May be taken concurrently with Spanish 201. Not open to students after taking Spanish 281.

## SPAN 212. Intermediate Conversation and Writing (3) [GE]

Prerequisites: Spanish 201 and 211.
Emphasis on oral communication and intermediate level writing in Spanish. May be taken concurrently with Spanish 202. Not open to students after taking Spanish 282.

SPAN 250. Women's Literature in the Hispanic World (3) [GE]
Prerequisite: Completion of the General Education requirement in Communication and Critical Thinking I.2., Written Communication.

Hispanic women authors and the cultural, literary, historical, and sociopolitical questions raised by their texts. Taught in English.
SPAN 281. Intermediate Spanish for Heritage Language Learners I (3) [GE]
Prerequisite: Exposure to Spanish in the home and neighborhood in the U.S.

Introduction to written Spanish and basic principles of writing. Enhances awareness of cultural text produced in Spanish-speaking world. Not open to native speakers (with high school diploma from a Spanish-speaking country) or students with credit in Spanish 201, 202, 211, 282, 301, or a higher-numbered Spanish course. Replaces Spanish 201 and 211 for Preparation for the Major.
SPAN 282. Intermediate Spanish for Heritage Language Learners II (3) [GE]
Prerequisite: Spanish 281.
Continuation of Spanish 281. Not open to native speakers (with high school diploma from a Spanish speaking country) or students with credit in Spanish 202, 212, 301, or a higher-numbered Spanish course. Replaces Spanish 202 and 212 for Preparation for the Major.
SPAN 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## SPAN 299. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
All upper division courses in Spanish are taught in Spanish unless otherwise stated.

No credit will be given for lower division courses taken after successfully completing any upper division Spanish course.
SPAN 301. Advanced Conversation and Reading (3)
Prerequisites: Spanish 202 and 212.
Continued development of oral communication and reading comprehension. Review of selected grammatical structures through use of literary and cultural materials. Some writing will be adjunct to reading. May be taken concurrently with Spanish 302. Not open to students with credit in Spanish 381 or 382.
SPAN 302. Advanced Conversation and Writing (3)
Prerequisites: Spanish 202 and 212.
Advanced practice at oral communication through conversations and public speaking. Practice of written Spanish through advanced composition. May be taken concurrently with Spanish 301. Not open to students with credit in Spanish 381 or 382.

SPAN 307. Introduction to Business Spanish (3)
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382.
Business vocabulary, basic business and cultural concepts, situational practice to conduct business in Spanish by preparing documents. Grammar review and development of cross-cultural awareness.
SPAN 340. Spanish Civilization (3) [GE]
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382.
Spanish culture of the past and present, with emphasis on literature, philosophy, and the arts.
SPAN 341. Spanish American Civilization (3) [GE]
Prerequisites: Spanish 301 and 302 , or Spanish 381 or 382.
Spanish American cultures, with emphasis on literature, philosophy, and the arts.
SPAN 342. Mexican Civilization (3) [GE]
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382.
The major currents and characteristics of Mexican culture, as expressed through the centuries in literature, philosophy, and the arts.

SPAN 350. Advanced Grammar (3)
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382.
Significant systematic features of modern Spanish grammar. Required for credential applicants.

## SPAN 381. Advanced Spanish for Heritage Language

 Learners (3)Prerequisite: Spanish 282.
Develops oral abilities in diverse registers at advanced level of proficiency. Writing production in critical thinking. Enhances awareness of cultural texts from Spanish-speaking world. Replaces Spanish 301 and 302 for the Spanish major. Not open to students with credit in either Spanish 301 or 302.
SPAN 382. Academic Reading and Writing for Native Speakers of Spanish (3)
Prerequisite: High school diploma from Spanish-speaking country.

Reading and writing as preparation for advanced academic writing. Readings from a variety of genres to include fiction. Production of expository essays that demonstrate critical competence. Development of linguistic ability and syntactic organization. Transformation of simple, basic structures into complex writing. Replaces Spanish 301 and 302 for the Spanish major. Not open to students with credit in either Spanish 301 or 302.
SPAN 391. Spanish Enhancement for Translation and Interpretations (3)
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382 , and 350.

Bridges gap between Spanish for communication and Spanish for work. Acquisition of translation and interpretation skills (active listening, text analysis, anticipation, memory, public speaking).
SPAN 395. Introduction to Literary Analysis (3)
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382.
Literary analysis of narrative, poetry, and theatre of Span-ish-speaking world through study of rhetorical devices.
SPAN 401. Spanish Literature and Cultural Studies (3)
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382, and 395.

Spanish writers and works in a variety of literary genres.
SPAN 402. Spanish American Literature and Cultural Studies (3)
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382, and 395.

Spanish American writers and works in a variety of literary genres.

## SPAN 407. Advanced Business Spanish (3)

Prerequisites: Spanish 307; Spanish 301 and 302, or Spanish 381 or 382.

Vocabulary and discourse related to business topics and functional areas, goods and services, marketing, finance, foreign market entry, import-export. Geographic literacy and cultural understanding of Spanish-speaking world.
SPAN 408. Spanish for Educators (3)
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382.
Project-based collaborative analysis of linguistic and cultural competencies in Spanish to interact with K-12 schools and Span-ish-speaking communities.
SPAN 409. Spanish for Health Professions (3)
Prerequisites: Spanish 301 and 302 or 381.
Project-based collaborative analysis of cultural and linguistic competencies needed for future health care professionals.
SPAN 410. Spanish for Legal and Criminal Justice Professionals (3)
Prerequisites: Spanish 301 and 302, or 381.
Spanish oral and written communication in criminal justice and legal fields within United States and Spanish-speaking countries. Rule of order terms and court protocols.
SPAN 448. Spanish Linguistics (3)
Prerequisite: Spanish 350.
Structural, historical, and applied Spanish linguistics.

SPAN 461. Spanish in the United States (3) [GE]
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382.
Language-related phenomena in Spanish-speaking groups and communities across the U.S. to include dialects, language maintenance, and language use in various sociocultural domains.

## SPAN 462. Language Variation in the Spanish-Speaking

World (3) [GE]
Prerequisite: Spanish 350.
Sociolinguistic and pragmatic variation across the Span-ish-speaking world. Interactions between identity, language, and society.

## SPAN 491. Introduction to Translation Studies (3)

Prerequisites: Spanish 350 and satisfaction of the Graduation Writing Assessment Requirement.

Theoretical grounding and practical problems of literary and nonliterary translation; linguistic and cultural obstacles; literary, legal, commercial, medical, social services lexicons in context.

## SPAN 492. Translation Theory (3)

Prerequisite: Spanish 491.
Historical overview of translation theory. Translation types and conventions. Theoretical considerations of lexical, morphological, verbal, phonic, syntactic, and hermeneutic elements. Cross-language equivalence, fidelity, loss and gain in translation. Criteria for excellence and evaluation. Culture and commerce of translation.

## SPAN 493. Advanced Spanish-English / English-Spanish

Translation (3)
Prerequisites: Spanish 350 and 491.
Practicum involving methods and techniques in translation of legal or government papers, banking documents, and business contracts from Spanish into English and from English into Spanish. Practice in translation of old Spanish into English (deeds, surveys, baptismal records, manuscripts of books).

## SPAN 496. Selected Studies in Spanish (3)

Prerequisites: Spanish 401 and 402 or 448.
Topics in Spanish or Spanish American language, literature, culture, and linguistics. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Maximum credit six units.
SPAN 499. Special Study (1-3)
Prerequisite: Consent of instructor.
Individual study. Maximum credit six units. This course is intended only for students who are currently enrolled in or who already have credit for all upper division courses in Spanish available in any given semester.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

SPAN 501. Genre Studies in Spanish Literature (3)
Prerequisites: Spanish 401 and 402.
A specific literary genre: overview of the genre's development in Spanish literature (Spanish novel, short story, theatre) or focus on a narrower period (contemporary narrative, modern poetry). May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.
SPAN 502. Genre Studies in Spanish American Literature (3)
Prerequisites: Spanish 401 and 402.
A specific literary genre: overview of the genre's development in Spanish American literature (the Spanish American novel, short story, theatre) or focus on a narrower period (vanguardista poetry, the "Boom"). May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

## SPAN 504. Don Quixote (3)

Prerequisites: Spanish 401 and 402.
A close reading of Cervantes' novel Don Quixote, Parts I and II.
SPAN 515. Mexican Literature (3)
Prerequisites: Spanish 401 and 402.
Mexican literature from the Romantic period to the present. Special emphasis placed on contemporary era.

SPAN 561. Methods in Teaching Spanish as a
Second Language (3)
Prerequisite: Spanish 350 or 448.
Teaching of Spanish as a second language: contemporary theory and methods.

## SPAN 594A. Consecutive English/Spanish Interpretation (3)

Prerequisite: Spanish 350 or 391.
Consecutive interpretation techniques focusing on current events to include notetaking technique for interpreters, preparation for meetings, language register, active listening, structure of a speech, abstracting meaning, sight translation in the booth.

## SPAN 594B. Simultaneous English/Spanish Interpretation (3)

Prerequisite: Spanish 594A with a grade of B (3.0) or better.
Simultaneous interpretation techniques focusing on current events. Simultaneous, whispered, and relay interpretation, preparation for meetings, language register, listening, structure of a speech, abstracting, sight translation in the booth.
SPAN 596. Selected Studies in Spanish (3)
Prerequisites: Spanish 401 and 402 or 448.
Topics in Spanish or Spanish American language, literature, culture and linguistics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

## Refer to the Graduate Bulletin.

# Special Education 

IN THE COLLEGE OF EdUCATION

OFFICE: North Education 70
TELEPHONE: 619-594-6665
WEBSITE: http://sdsu.edu/education/sped
Accredited by the California Commission on Teacher Credentialing.

## Faculty

Emeritus: Brady, Cegelka, Doorlag, Forbing, Graves, Johnson, Kitano, Lewis, Lynch, McClard, McIntosh
Chair: Hall
Professor: Hall
Associate Professors: Brandon, Kraemer, Qian, Suhrheinrich
Assistant Professors: Brum, Collins, Luelmo

## Offered by the Department

Master of Arts degree in education.
Bilingual (Spanish) multiple subject and special education credential (refer to the Graduate Bulletin).
Education specialist credentials in special education.
Early childhood special education.
Mild/moderate disabilities.
Moderate/severe disabilities.
Certificate in behavior analysis (refer to the Graduate Bulletin).
Certificate in bilingual (Spanish) special education (refer to the Graduate Bulletin).
Certificate in developing gifted potential (refer to the Graduate Bulletin).
Early childhood special education added authorization (refer to the Graduate Bulletin).

## Courses (SPED)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
SPED 450. Classroom Adaptations for Special Populations (3)
Historical, legal, and philosophical aspects of special education. Instructional and assessment support for access to general education curriculum. Meets requirements for preliminary multiple, single subject, and education specialist teaching credentials.
SPED 496. Selected Topics in Special Education (1-4)
Prerequisite: Consent of instructor.
Instructional sequences focusing on a single topic or competency dealing with special education. Topics differ each semester to adjust to current literature in the field, training needs, and resource availability. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## SPED 499. Special Study (1-3)

Prerequisite: Consent of instructor. Open only to senior and graduate students in education who have shown ability to work independently.

Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)

## SPED 500. Human Exceptionality (3)

Historical, philosophical, and legal aspects of special education that affect identification and programming for diverse learners with exceptionalities. Characteristics of individuals with special needs and implications for adapting living and learning environments. Meets special education mainstreaming requirement for all basic teaching credentials.

## SPED 501. Typical and Atypical Learning Processes (3)

Prerequisites: Credit or concurrent registration in Special Education 500; concurrent registration in Special Education 502.

Theory, research, and processes in learning in relation to individuals with disabilities. Foundations of learning, development, and intervention.

## SPED 502. Field Experiences in General and Special

## Education (1) $\mathrm{Cr} / \mathrm{NC}$

Three hours of observation/participation per week.
Prerequisite: Concurrent registration in Special Education 501.
Observation and participation in general and special education classrooms and related school activities for students with

## disabilities.

SPED 505. Educational Services for Students with Serious Emotional Disturbance (1)
Prerequisite: Admission to credential program.
Educational needs and services for students with serious emo-
tional disturbance. Classroom interventions and procedures.

## SPED 524. Characteristics of Students with Mild/Moderate

 Disabilities (3)Prerequisite: Special Education 500.
Historical and philosophical perspectives of programs related to students with mild/moderate disabilities. Research on educational programs, curricular approaches, and characteristics.
SPED 525. Characteristics of Students with Moderate/Severe Disabilities (3)
Prerequisite: Special Education 500.
Historical and philosophical perspectives of programs related to students with moderate/severe disabilities. Research on educational programs, curricular approaches, and characteristics with emphasis on services in context of school reform.

## SPED 526. Characteristics and Education of Students with

Physical, Health, and Sensory Impairments (3)
Prerequisites: Special Education 450 with grade of $C$ (2.0) or better and admission to credential program.

Characteristics, needs, and supports for individuals with physical, health, and sensory impairments in educational, home, and community settings. Implications of health concerns for programming.

## SPED 527. Special Education in a Pluralistic Society (3)

Prerequisite: Credit or concurrent registration in Special Education 500.

Historical and philosophical perspectives of cultural pluralism in special education and programs related to diverse students with disabilities. Research on curricular approaches and instructional needs. Sociocultural aspects related to disability, race, ethnicity, gender, and language.

SPED 528. Young Children with Disabilities and Their Families (3)
Prerequisite: Special Education 500.
Characteristics, needs, and educational programs and services for infants, toddlers, and preschoolers with disabilities and their families. Legislative requirements, models of service delivery, recommended practices, and family diversity.

## SPED 530. Issues in Autism (3)

Prerequisite: Admission to credential program.
Definition, etiology, assessment, and instructional practices used to address autism. Historical and current issues.

## SPED 534. Classroom Assessment of Students with

Mild/Moderate Disabilities (3)
Prerequisite: Admission to credential program.
Classroom assessment in general and special education for students with mild/moderate disabilities. Curriculum-based data collection strategies. Influences of cultural and linguistic diversity, and implications for curricular and instructional adaptations.

## SPED 543. Educational Programs and Services for Young

Children with Disabilities: Preschoolers (3)
Prerequisites: Admission to credential program and concurrent registration in approved fieldwork.

Developing, implementing, and evaluating educational programs and services for young children with disabilities. Selecting and adapting curriculum and instructional approaches, collaborating with families from diverse cultural/linguistic backgrounds, and monitoring program effectiveness. (Formerly numbered Special Education 643A.)

## SPED 545. Issues in Curriculum and Instruction for Students

 with Extensive Support Needs (2-3)Prerequisites: Special Education 450 with a grade of $C$ (2.0) or better and admission to credential program.

Practical strategies for working with children and adolescents with extensive support needs in a variety of learning environments. Collaboration with other professionals in the field and involve families as partners in the educational process. (Formerly numbered Special Education 645.)
SPED 553. Behavioral Strategies and Supports for Students

## with Disabilities (3)

Prerequisite: Admission to credential program.
Positive behavioral supports for students with disabilities in general and special education settings. Current theories and programs in functional assessment and behavioral change. Applications in educational and community environments with diverse students.
SPED 560. Applications of Technology for Individuals with Disabilities (3)
Prerequisite: Admission to credential program.
Educational applications of current technologies for learners with disabilities. Selection, modification, and classroom use of technologies to improve or bypass physical, sensory, communicative, learning, and social limitations.

## SPED 562. Collaboration, Legislation, and Educational Planning

 in Special Education (2)Prerequisites: Admission to credential program and credit or concurrent registration in Special Education 980.

Collaboration, legislation, and individualized special education program planning skills for working with community resources, parents, and school personnel. Goals, interpersonal processes, legal and ethical issues, listening and questioning techniques, objectives, outcomes, and team functions focused on developing and implementing an individualized education plan. (Formerly numbered Special Education 662.)

SPED 596. Selected Topics in Special Education (1-4)
Specialized study of selected topics in special education. May be offered as either a workshop or lecture/discussion. May be repeated with new content. See Class Schedule for specific content. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.

# Speech, Language, and Hearing Sciences 

In the College of Health and Human Services

OFFICE: Speech, Language, and Hearing 221
TELEPHONE: 619-594-7746 / FAX: 619-594-7109
WEBSITE: http://slhs.sdsu.edu
Accredited in speech-language pathology and audiology by the Council on Academic Accreditation in Audiology and Speech-Language Pathology.

## Faculty

Emeritus: Allen, Cheng, Christensen, Davies, Gutierrez-Clellen, Kramer, Newhoff, Nichols, Seitz, Shapiro, Thal, Thile, Williams
Director: Love-Geffen
Professors: Barlow, Emmorey, Love-Geffen, Mackersie,
Pruitt-Lord, Torre
Associate Professors: Blumenfeld, Dreisbach Hawe, Nip, Pham
Assistant Professors: Mills, Ries-Cornou, Silkes
Lecturers: Branch, Buzzanga, Goodwiler, Hye, Kirsch, Lopes, Schmitz

## Offered by the School

Doctor of Philosophy degree in language and communicative disorders.
Doctor of Audiology.
Master of Arts degree in speech, language, and hearing sciences.
Major in speech, language, and hearing sciences
with the B.A. degree in liberal arts and sciences.
Certificate in bilingual speech-language pathology
(refer to the Graduate Bulletin).
Speech language pathology credential.

## The Major

The School of Speech, Language, and Hearing Sciences is committed to preparing speech-language-hearing professionals to meet the challenges of a racially, ethnically, and linguistically diverse society. There are limited employment opportunities for holders of the bachelor's degree; the bachelor's degree in speech, language, and hearing sciences serves as the basis for further graduate and professional study. A master's or professional doctoral degree, national certification and/or state licensure or school credential are needed for professional practice in areas such as speech-language pathology and audiology. A research doctorate (Ph.D.) is required for individuals pursuing a research and teaching career at the university level.

Speech-language pathology and audiology are professions that identify, help, and study persons with communicative disorders. Those entering these professions should possess a strong motivation to help individuals with communication problems. Preparation involves acquiring the knowledge and skills necessary to assume responsibility for assessment, education, and rehabilitation of persons with speech, language, and hearing disorders.

The master's degree is an advanced degree for those wanting to work professionally as a speech-language pathologist. A professional doctorate is required for those wanting to work professionally as an audiologist. Positions in speech, language, and hearing sciences are available in many public and private settings working with persons with speech, language, and hearing impairments, and the cognitive disorders underlying these impairments. Graduates with certification or licensure work in rehabilitation centers, schools, hospitals, private agencies, private practice, industry, research, and university teaching and research centers. Career opportunities are particularly good for minority, bilingual or bicultural persons.

The undergraduate curriculum is broad, involving coursework on normal and disordered speech, language, and hearing, as well as clinical procedures. Students interested in the speech, language, and hearing sciences program are advised to take college level courses in anatomy, biology, psychology, English, physiology, linguistics, physics, and mathematics. Studies leading to private practice, hospital work, industrial work, work in school settings, or preparation for graduate work are similar in many ways; it is the area of specialization that serves to differentiate courses of study.

## Retention Policy

The College of Health and Human Services expects that all speech, language, and hearing sciences majors will make reasonable academic progress towards the degree. Speech, language, and hearing sciences premajors who have completed major preparatory courses, earned 60 units, but have less than a 2.75 GPA may be removed from the premajor and placed in undeclared.

## Impacted Program

The speech, language, and hearing sciences major is an impacted program. To be admitted to the speech, language, and hearing sciences major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.75 .

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Speech, Language, and Hearing Sciences Major

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 12203) (SIMS Code: 550107)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in speech, language, and hearing sciences courses can apply to the degree.

A minor is not required with the major.
Preparation for the Major. Speech, Language, and Hearing Sciences 106, 150; Biology 100; Physics 180A (Chemistry 100 can be substituted for Physics 180A); Psychology 101 and 260; Psychology 280 (Sociology 201, Statistics 119 or 250 can be substituted for Psychology 280). (21-23 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to the section of this catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. All speech, language, and hearing sciences majors are required to participate in a pre-approved international experience to increase awareness of cross-cultural issues, global health, economic, political, cultural, social services, and health challenges experienced by local populations in international environments. Students participate in residence for two or more weeks (exemption from the study abroad portion of the requirement must be approved by the dean of the college based on serious and compelling life events or physical limitations; a relevant course will be substituted). Specific details can be found on the college website at http://www.chhs.sdsu.edu/international.

To meet the international experience requirement, majors must complete one of the following:

1. A CSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Abroad Program;
4. An SDSU Study Travel Program;

OR
5. One course selected from:

- Health and Human Services 290 or 350;
- Asian Studies 490;
- Education 450;
- General Studies 450;
- International Security and Conflict Resolution 450;
- Latin American Studies 320, 450, or 550;
- Political Science 450;
- Public Health 550;
- Science 350.

Major. Speech, Language, and Hearing Sciences 300, 305, $320,321,340,512,513,514,539$, and 580. (32 units)

Students pursuing a graduate degree should consult the Graduate Bulletin for required undergraduate preparation.

Time Limitation. All courses for the major must be completed within seven years for the granting of the undergraduate degree. Any course completed more than seven years prior to the date on which all requirements for the degree are completed cannot be used to satisfy unit requirements for the degree. Exceptions for individual courses must be approved by the department and filed with the Office of Advising and Evaluations.

## Credential

The School of Speech, Language, and Hearing Sciences offers academic and practica coursework applicable to the Speech Language Pathology (SLP) Credential (Credential Code: 00900), required for working in California public schools.

Applicants to a credential program are required to submit scores from the California Basic Education Skills Test (CBEST) as part of the application for admission to a credential program. Note that the CBEST is given only three or four times each year.

Credential candidates are required to have the Certificate of Clearance (finger printing) prior to beginning the school experience. Candidates should apply for the Certificate of Clearance several months prior to submitting an application to the school for public school practicum placement in order for the certificate to be processed in time for the placement.

## Speech Language Pathology (SLP) Credential in Language, Speech, and Hearing

## (Credential Code: 00900)

Students desiring to work with pupils with speech-language and hearing impairments on an itinerant or pull-out basis must complete the Speech Language Pathology (SLP) Credential in Language, Speech, and Hearing (LSH). A master's degree in speech, language, and hearing sciences is required of all candidates graduating with a SLP credential. Candidates for SLP credential in Language, Speech, and Hearing (LSH) must complete the requirements for the Certificate of Clinical Competence (CCC)
from the American Speech-Language Hearing Association and the requirements of California licensure in Language and Speech. See sections on Certificates and Licensure.

## Admission Requirements:

1. Formal application to San Diego State University and to the School of Speech, Language, and Hearing Sciences. All applicants for the credential must satisfy the admission requirements of the university and of the school for classified graduate standing and be recommended by the school for admission to the credential program.
2. California Basic Education Skills Test (CBEST) results.
3. Interview with the coordinator of the Language, Speech and Hearing credential.

## Program Requirements:

1. The credential program requires a master's degree in Speech-Language Pathology.
2. The following courses are also required: Speech, Language, and Hearing Sciences 525, 546 (or transcript credit in an equivalent course), 618A and/or 619, 618B, 626A, 626B, 626C, 627, 629, 630, 933.
3. The program of professional preparation for the SLP Credential in Language, Speech, and Hearing requires a minimum of 75 semester credit hours, including a minimum of 27 semester credit hours in basic sciences and a minimum of 36 semester credit hours in professional coursework. At least 30 of the 36 semester credit hours must be in courses for which graduate credit is received, and at least 21 of the 30 graduate semester credit hours must be in the professional area for which the credential is sought. The candidate must complete a minimum of 25 supervised observation hours and 350 clinical contact hours including 50 clock hours in each of three types of clinical setting. This credential also requires that a minimum of 100 clock hours be completed in the school setting. See the section on Certificates and the Credential Coordinator for additional information.

## Certificates and Licensure

Preparation Leading to the Certificate of Clinical Competence in Speech-Language Pathology and Audiology by the Council on Academic Accreditation in Audiology and Speech-Language Pathology

Students may complete the academic and clinical practice requirements leading to the Certificate of Clinical Competence in Speech-Language Pathology (CCC-SLP) or to the Certificate of Clinical Competence in Audiology (CCC-A) given by the Council on Academic Accreditation in Audiology and Speech-Language Pathology. The certificate requires a professional doctorate in audiology (refer to Graduate Bulletin), a master's degree in speech-language pathology, and specialized clinical experiences. The applicant must pass a national examination in the area for which the certificate is sought and complete a Clinical Fellowship (following approval of academic coursework and clinical practica). Consult an adviser in the area in which certificate is desired.

## Preparation Leading to State Licensure in Speech Pathology or Audiology

Students may complete the academic and clinical practicum requirements leading to California State Licensure in Speech Pathology or in Audiology, a legal requirement for all individuals professionally employed in non-public school settings and some public school settings. The Speech Pathology and Audiology Examining Committee which operates within the California State Board of Medical Quality Assurance requires a master's degree or equivalent in speech, language, and hearing sciences in the area (Speech Pathology or Audiology) in which the license is to be granted, 300 clock hours of supervised clinical experience, a national examination, and nine months of full-time supervised work experience (Required Professional Experience). For audiology, the fourth year externship satisfies the Required Professional

Experience. Most Licensure and ASHA Certification requirements may be fulfilled concurrently. Consult an adviser in the area in which licensure is desired for specific information.

## High School Equivalents

High school American sign language courses may be used for purposes of placement in college courses and may be counted toward meeting the language requirement in various majors. These high school courses will not count as college credit toward graduation.

Secondary school language courses can be used as follows:

1. The first two years of high school level language count as the equivalent of the first semester of a college level course.
2. The first three years of high school level language count as the equivalent of the first two college semesters.
3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the language requirement.

## Courses (SLHS)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

SLHS 106. Introduction to Speech, Language, and Hearing Sciences (3)
Orientation to field of speech-language pathology and audiology, to include scope of practice, professional issues, and research in speech, language, and hearing sciences.
SLHS 150. Sign Languages and Deaf Culture (3) [GE]
Introduction to sign languages, deafness and deaf culture. General issues of human language, language learning, and minority societies.

## SLHS 295. Introduction to Research (1-3)

Research methods and tools that can be applied in a variety of research laboratories. Maximum credit six units.

## SLHS 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

SLHS 300. Introduction to Language Science (3)
Prerequisites: Credit or concurrent registration in Speech, Language, and Hearing Sciences 106 and a cumulative GPA of 2.75 or better.

Structure, acquisition, processing, and neurological organization of language in typical and disordered communication.

## SLHS 305. Hearing Science (3)

Prerequisites: Credit or concurrent registration in Speech, Language, and Hearing Sciences 106 and a cumulative GPA of 2.75 or better.

Concepts of hearing science. Hearing science components to include physical acoustics, anatomy and physiology of auditory system, and psychoacoustics.

## SLHS 320. Phonetics (3)

Two lectures and three hours of laboratory.
Prerequisites: Credit or concurrent registration in Speech, Language, and Hearing Sciences 106 and a cumulative GPA of 2.75 or better.

Principles of speech production and practical skills in discriminating and transcribing sounds of various dialects in English and other languages, as well as clinical populations. Competency in IPA broad and narrow transcription, classification of speech sounds, and patterns of speech.

## SLHS 321. Anatomy and Physiology of Speech (4)

Three lectures and three hours of laboratory.
Prerequisites: Credit or concurrent registration in Speech, Language, and Hearing Sciences 106; Psychology 260, and a cumulative GPA of 2.75 or better.

Anatomy and physiology of respiratory, phonatory, and articulatory systems related to speech.
SLHS 340. Principles of Audiology (3)
Prerequisite: Speech, Language, and Hearing Sciences 305 with a grade of $C$ (2.0) or better. Proof of completion of prerequisite required: Copy of transcript.

Diagnostic audiology procedures: Pure-tone testing, masking, speech recognition testing and immittance. Integration and interpretation of results from the basic audiological test battery.

## SLHS 496. Topics in Speech, Language, and Hearing

 Sciences (1-4)Study of some problem in speech, language, and hearing sciences. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Maximum credit six units.

## SLHS 499. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)

## SLHS 511. Aural Rehabilitation (3)

Prerequisites: Speech, Language, and Hearing Sciences 320, 340. Recommended: Speech, Language, and Hearing Sciences 300, 513.

Theoretical, methodological, and technical issues related to facilitating receptive and expressive communication in individuals who are deaf or hard-of-hearing. Emphasizes multidisciplinary case management of children.

## SLHS 512. Phonological Acquisition and Disorders (3)

Prerequisite: Speech, Language, and Hearing Sciences 320 with a grade of $C$ (2.0) or better. Proof of completion of prerequisite required: Copy of transcript.

Phonology, phonological development, and phonological disorders as they relate to basic linguistic theory. Concepts considered through critical thinking and problem-solving.
SLHS 513. Foundations of Speech-Language: Development (4)
Prerequisites: Speech, Language, and Hearing Sciences 300, 320, 321.

Speech-language development as related to theories of language acquisition, development, and clinical practice in children from birth to school-age.

## SLHS 514. Foundations of Speech-Language: Differences and

 Disorders in Children (3)Prerequisite: Speech, Language, and Hearing Sciences 513.
Speech and language disorders and issues related to assessment of and intervention with children from culturally and linguistically diverse populations.

## SLHS 521. Speech-Language Screening of Children (1) $\mathrm{Cr} / \mathrm{NC}$

Three hours of laboratory.
Prerequisite: Clinic clearance.
Screening speech and language of children in various community facilities and settings.
SLHS 525. Clinical Processes (1-2) Cr/NC
Prerequisite: Consent of instructor.
Clinical issues, policies, and methods in speech-language pathology. Experience in writing lesson plans and clinical reports. Clinical observation to partially fulfill requirements for certification. Maximum credit five units.

SLHS 539. Neuroanatomy and Disorders of Speech and Language (3)
Prerequisites: Speech, Language, and Hearing Sciences 150, 300,305 , and 321 ; or graduate standing.

Structural and functional neuroanatomy and disorders of speech and language resulting from pathology of the nervous system.

## SLHS 546. Clinical Issues in Aural Rehabilitation (2)

Prerequisite: Consent of instructor.
Theoretical, methodological, and technical issues related to the speech-language pathologist's role in facilitating communication in individuals who are deaf or hard-of-hearing.

## SLHS 570. Dysphagia (4)

Prerequisite: Consent of instructor.
Measurement techniques and research in dysphagia. Assessment and treatment of dysphagia and swallowing problems in children and adults.

## SLHS 580. Communication Processes and Aging (3)

Prerequisite: Twelve upper division units in an appropriate major.
Normal and disordered communication processes in the aging.
SLHS 590. Seminar in Research Foundations of Speech,
Language, and Hearing Sciences (3)
Prerequisites: Consent of instructor and a grade of $\mathrm{B}+(3.3)$ or better in Speech, Language, and Hearing Sciences 305, 320, 513. Open only to senior speech, language, and hearing sciences majors. Graduate students may not use this course toward program of study.

Specialized study of selected topics in speech, language, and hearing sciences.

## SLHS 595. Research Practicum (1-3)

Prerequisites: Consent of instructor and a cumulative GPA of 3.0 or better.

Participation in a specific research activity under faculty supervision. Maximum combined credit of six units of Speech, Language, and Hearing Sciences 595 and 795.

## SLHS 596. Selected Topics in Speech, Language, and Hearing

 Sciences (1-4)Prerequisites: Twelve units in speech, language, and hearing sciences courses.

Specialized study of selected topics from the area of speech-language pathology, audiology, education of the hearing impaired, and speech and hearing science. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

## Refer to the Graduate Bulletin.

IN THE COLLEGE OF SCIENCES

OFFICE: Geology/Mathematics/Computer Science 413
TELEPHONE: 619-594-6191
Faculty
Emeritus: Burdick, Macky, Noble, Romano
Chair: O'Sullivan
Associate Chair for Statistics: Lin
Professors: Fan, Levine
Associate Professors: Bailey, Chen, Lin
Assistant Professors: Román, Scharf
Lecturer: Duncan
Offered by the Department of Mathematics and Statistics
Master of Science degree in statistics.
Concentration in biostatistics.
Major in statistics with the B.S. degree
in applied arts and sciences.
Emphasis in actuarial science.
Emphasis in data science.
Minor in statistics.

## The Major

Statistics is the science which studies data - its collection, description, analysis, and interpretation. Almost all modern professions, from economists to engineers and from social scientists to medical scientists, rely on statistics. Statistical methods are used for studying relationships, predicting results, testing hypothesis, and a variety of other purposes.

The Bachelor of Science degree in statistics is designed to provide students with a fundamental understanding of probability and mathematical statistics, a complementary knowledge of basic methods for data collection and inference, and practical computing skills to carry out statistical analyses of problems in many different areas of application.

One option within the major allows students with a strong interest in statistical or biostatistical aspects of a particular science to apply courses in that science to their major. This option should provide the interested student with a good background for employment or graduate work in statistics, biostatistics, or in that science. Emphases in actuarial science and data science enable students to pursue further specializations aligned with professional opportunities in these areas.

Statistics is the discipline at the heart of the scientific method of discovery. Statistical principles are used in designing experiments and surveys to collect information, and statistical procedures are applied to summarize information, draw conclusions, and make decisions.

Because of the broad applicability of their training in statistical reasoning and data analysis, undergraduate majors are prepared for careers in diverse fields - such as biotechnology, environmental science, insurance, industrial manufacturing, and market research - in which the need for professionally trained statisticians is great.

Graduates who seek to acquire additional skills in applied or theoretical statistics may also consider programs of advanced study at the master's or doctoral level. Statisticians with advanced degrees are sought for senior positions in industry and government, as well as teaching positions in secondary schools, community colleges, and universities.

## Impacted Program

The statistics major and emphases are impacted programs. To be admitted to the statistics major or an emphasis, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete Mathematics 150 and 151 with a minimum grade of $C$ (2.0) or better. These courses cannot be taken for credit/no credit (Cr/NC);
c. Complete a minimum of 60 transferable semester units;
d. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Statistics Major

With the B.S. Degree in Applied Arts and Sciences
(Major Code: 17021) (SIMS Code: 776371)
All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A minor is not required with this major.
Upon entry to the program, the student will be assigned to an undergraduate adviser in statistics. Thereafter, the student will meet with the adviser each semester and discuss his or her academic program. A program of study must be approved by the undergraduate adviser in statistics.

In addition to meeting the requirements for undergraduate standing and the basic requirements for the bachelor of science degree as described in this catalog, the student must complete a Graduation Writing Assessment Requirement and must complete a minimum of 60 units of coursework as described below.

Preparation for the Major. Statistics 119 or 250; Mathematics 150, 151, 245, 254. Mathematics 150 and 151 must be completed with a minimum grade of $C$ (2.0) and cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). (17 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Additional Lower Division Coursework Required. Mathematics 252, Computer Science 107. (7 units)

Major. A minimum of 36 upper division units to include Statistics 350A, 350B, 410, 551A, 551B; nine units selected (with the approval of the undergraduate adviser in statistics) from Statistics $325,496,520,560,575,580,596 ; 12$ upper division units in statistics, mathematics (excluding Mathematics 302, 303, 312, 313, 414), computer science, or a science of application (selected with the approval of the undergraduate adviser in statistics).

Master Plan. A master plan of the courses taken to fulfill the major must be approved by the adviser and filed with the major department.

## Emphasis in Actuarial Science <br> (SIMS Code: 776372)

This emphasis is designed to prepare students for careers in the actuarial profession, applying probability and statistical models to problems of insurance and finance. Actuaries improve financial decision making by evaluating the current financial implications of uncertain future events. Students completing this emphasis would also be well prepared for graduate study in actuarial science or statistics.

Preparation for the Major. Statistics 119 or 250; Accountancy 201; Computer Science 107; Economics 101, 102; Mathematics 150, 151, 245, 252, 254. Mathematics 150 and 151 must be completed with a minimum grade of $C$ (2.0) and cannot be taken for credit/ no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). (33 units) The student must complete these courses before being allowed to register for the upper division finance courses.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of $C(2.0)$ or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Statistics 350A, 350B, 551A, 551B, 575; Business Administration 323; Economics 320, 321; Finance 327; three units selected from Statistics $325,410,496,560,596$; six units selected from Finance 421, 427, or an appropriate course selected with the approval of the undergraduate adviser in Statistics.

Master Plan. A master plan of the courses taken to fulfill the major must be approved by the adviser and filed with the major department.

## Emphasis in Data Science <br> (SIMS Code: 776374)

Modern day statistics applications require heavy computing for manipulating massive data sets, mining immense databases, and implementing computationally intensive data analytic tools to solve complex scientific problems. This emphasis is designed to prepare students for careers in statistics by providing them with the data analytic and computational machinery needed to excel in all avenues of statistical science during an information age where statistical computing plays a crucial role. Students completing this emphasis would also be well prepared for graduate study in statistical computing and statistics.

Preparation for the Major. Statistics 250, Mathematics 150, 151, 245, 252, 254, Computer Science 107, 108. Mathematics 150 and 151 must be completed with a minimum grade of $C$ (2.0) and cannot be taken for credit/no credit (Cr/NC). (27 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of $C$ (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 36 upper division units to include Statistics 325, 350A, 350B, 410, 551A, 551B, 580; Computer Science 310; Computer Science 503 or 514 or Management Information Systems 380; Linguistics 571 or 572 [or Big Data Analytics 572] or 581 [or Computer Science 581]; six upper division units in statistics, computer science, or a science of application with a heavy statistical computing component (selected with the approval of the undergraduate adviser in statistics).

Master Plan. A master plan of the courses taken to fulfill the major must be approved by the adviser and filed with the major department.

## Statistics Minor

(SIMS Code: 776369)

The minor in statistics consists of a minimum of 15 units in statistics to include Statistics 250 (or equivalent), 350A, 350B or 410, and six units of upper division electives in statistics. For Statistics 550 and 551A, students must satisfy lower division calculus and linear algebra prerequisites (Mathematics 151, 252, and 254 as appropriate).

The minor program includes a combination of courses in applied statistical methods, computer-oriented data analysis, probability, and mathematical statistics, which can be tailored to the student's major, academic, or professional interests. For example, business students interested in actuarial science may wish to consider a minor comprising Statistics 350A, 350B, 551A, and 551B. Students in the social, behavioral, and natural sciences who are particularly interested in applications and data analysis may wish to consider a minor comprising Statistics 350A, 350B, 410 , and 520.

Students considering a minor in statistics are encouraged to consult with their major adviser and with the minor adviser in statistics. Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed at San Diego State University.
Courses (STAT)
Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

STAT 119. Elementary Statistics for Business (3) [GE]
Measures of central tendency and variability, frequency distributions; probability, Bayes theorem, probability distributions (including binomial, hypergeometric, and normal), sampling distributions, confidence intervals, significance testing, regression and correlation. Statistics 119A is designed to be taken concurrently for students who may need additional review. Not open to students with credit in Statistics 250. Students with credit or concurrent registration in the following lower division statistics courses other than Statistics 250 will be awarded a total of four units for the two (or more) courses: Statistics 119; Administration, Rehabilitation and Postsecondary Education 201; Biology 215; Civil Engineering 160; Economics 201; Linguistics 270; Political Science 201; Psychology 280; Sociology 201.

## STAT 119A. Recitation for Elementary Business

Statistics (1) $\mathrm{Cr} / \mathrm{NC}$
Two hours of activity.
Prerequisite: Concurrent registration in Statistics 119.
Additional problem solving, data analyses, statistical concept discussions, and applications.
STAT 119X. Elementary Statistics Support (1) Cr/NC
Three hours of activity.
Prerequisite: Concurrent registration in Statistics 119. Required for students who have not satisfied the SDSU Mathematics/Quantitative Reasoning Assessment requirement.

Required support course for Statistics 119. Credit in this course satisfies the SDSU Mathematics/Quantitative Reasoning Assessment requirement.
STAT 200. Introduction to Data Science with R (4)
Three lectures and three hours of laboratory.
Basic data analysis with R. Summarizing and visualizing data. Sampling and distribution. Analysis tools to include clustering, confidence intervals, regression, and sampling.

STAT 250. Statistical Principles and Practices (3) [GE]
Two lectures and two hours of activity.
Descriptive statistics, data displays, measures of central tendency and variability, random variables, sampling distribution. Estimation and hypothesis tests for means and proportions, linear regression and correlation. Not open to students with credit in Statistics 119. Students with credit or concurrent registration in the following lower division statistics courses other than Statistics 119 will be awarded a total of four units for the two (or more) courses: Statistics 250; Administration, Rehabilitation and Postsecondary Education 201; Biology 215; Civil Engineering 160; Economics 201; Linguistics 270; Political Science 201; Psychology 280; Sociology 201.

## STAT 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## STAT 299. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

NOTE: Proof of completion of prerequisites required for all upper division courses: Copy of transcript.
STAT 325. SAS Programming and Data Management (3)
Prerequisite: Statistics 250 or comparable course in statistics.
Entry, management, and summary of statistical data using SAS programming language. Data structures and manipulation, screen editing, visual displays, macros, related topics.

## STAT 350A. Statistical Methods (3)

Prerequisite: Statistics 250 or comparable course in statistics.
One- and two-sample hypothesis tests, paired difference tests, tests for variances, analysis of variance. Linear regression and correlation. Chi-square tests. Simple nonparametric tests. Power of hypothesis tests.

## STAT 350B. Statistical Methods (3)

Prerequisite: Statistics 350A.
Multiple regression, factorial models and nonparametric methods, all with emphasis on applications.
STAT 410. R Programming and Data Science (3)
Prerequisite: Statistics 350B.
Numerical and simulation methods, statistical graphics, and statistical procedures for analyzing data. Logistic regression, multiple linear regression, and one- and two-way ANOVA models. Matrix formulations of regression models.

## STAT 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## STAT 499. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
NOTE: Proof of completion of prerequisites required for all upper division courses: Copy of transcript.
STAT 520. Applied Multivariate Analysis (3)
Prerequisite: Statistics 350B or comparable course in statistics.
Multivariate normal distribution, multivariate analysis of variance, principal components, factor analysis, discriminant function analysis, classification, and clustering. Statistical software packages will be used for data analysis.

## STAT 550. Applied Probability (3)

Prerequisites: Mathematics 151 and 254.
Computation of probabilities via enumeration and simulation, discrete and continuous distributions, moments of random variables. Markov chains, counting and queuing processes, and selected topics.

STAT 551A. Probability and Mathematical Statistics (3)
Prerequisite: Mathematics 252.
Discrete and continuous random variables, probability mass functions and density functions, conditional probability and Bayes' theorem, moments, properties of expectation and variance, joint and marginal distributions, functions of random variables, moment generating functions. Special distributions and sampling distributions.

## STAT 551B. Probability and Mathematical Statistics (3)

Prerequisite: Statistics 551A.
Point and interval estimation and hypothesis testing in statistical models with applications to problems in various fields.

## STAT 560. Sample Surveys (3)

Prerequisite: Statistics 550 or 551A.
Methods for design and analysis of sample surveys with applications to social and biological sciences. Simple random sampling, stratification and clustering, ratio and regression estimators, subsampling, selected topics in survey methodology.

## STAT 570. Stochastic Processes (3)

Prerequisite: Statistics 551A.
Introduction to stochastic processes with selected applications.
STAT 575. Actuarial Modeling (3)
Prerequisite: Statistics 550 or 551A.
Actuarial models and applications of probability and statistics to insurance and other financial risks. Utility theory; risk models, compound processes; survival distributions and life tables; life insurance, annuities and benefits.

## STAT 580. Statistical Computing (3)

Two lectures and two hours of activity.
Prerequisite: Statistics 551B.
Machine computation in development, application, and evaluation of advanced statistical techniques. Floating arithmetic and algorithm stability; numerical methods for parameter estimation (including maximum likelihood) and multivariate probability integration; simulation and other computer-intensive statistical techniques.

## STAT 596. Advanced Topics in Statistics (1-4)

Prerequisite: Consent of instructor.
Selected topics in statistics. May be repeated with the approval of the instructor. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

GRADUATE COURSES
Refer to the Graduate Bulletin.

# Sustainability 

## In the College of Arts and Letters

OFFICES: Arts and Letters 417
TELEPHONE: 619-594-5066 / 619-594-0978
E-MAIL: dcarruth@sdsu.edu / mlauer@sdsu.edu

## Faculty

Faculty assigned to teach sustainability courses are drawn from the colleges at San Diego State University. The program is housed in the College of Arts and Letters.
Program Co-Directors and Undergraduate Advisers:
David V. Carruthers (Political Science), Matthew T. Lauer
(Anthropology)
Committee: Alcosser (English and Comparative Literature), Atterton (Philosophy), Biggs (Geography), Elkind (History)

## Offered by Sustainability

Major in sustainability with the B.A. degree
in liberal arts and sciences.
Minor in sustainability.

## The Major

The major in sustainability focuses on the interface of human and natural systems. Students gain an understanding of sociopolitical, historical, philosophical, moral, and scientific aspects of environmental problems. Students take courses in the humanities, the social sciences, and the natural sciences, and have the flexibility to concentrate their studies in one or more of these areas. Emphasis is placed on strong writing, research, quantitative skills, and broad liberal arts perspective. The curriculum emphasizes the study of cultural, historic, social, economic, political values and forces that shape resource use and constrain responses to sustainable development. Students are engaged to define sustainability in its various uses, evaluate international debates about the meaning of this term, and the goals of sustainability movements. The program takes an interdisciplinary approach to local, regional, and global environmental issues. This approach fosters systems-thinking skills, written and verbal communication skills, quantitative and qualitative skills, analytic and problem-solving skills. These skills combined with knowledge of foundational scientific principles, an understanding of the human and social contexts of environmental problems, and the policy and decision making contexts within which these problems are reckoned are consistent with careers focused on sustainability; the improvement of the human quality of life through balanced and adaptive stewardship of resources that lie at the human nature interface. The primary objective of the major is to aid in the development of strategies, practices and policies for sustainable societies based on respect and care for the community of life, human cultures, ecological integrity, social and economic justice, and the result of scientific research.

Graduates majoring in sustainability are well prepared for positions in local and state government, particularly in the areas of public lands, parks, natural resource management, environmental conservation and restoration, environmental education, and environmental planning. The major is good preparation for a career of further education in environmental advocacy, energy, private consulting, law, natural resource management, social sciences, and the humanities. Graduates may also work in nonprofit organizations such as the Nature Conservancy, Audubon Society, Green Peace, and Sierra Club, or become teachers in primary, secondary education, or universities.

## Advising

Students are required to meet with an undergraduate adviser in order to declare the major. All students admitted to the university with a declared major in sustainability are urged to meet with an undergraduate adviser either prior to or during their first semester.

## Impacted Program

The sustainability major is an impacted program. To be admitted to the sustainability major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Sustainability Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 49101) (SIMS Code: 117001)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units of sustainability courses can apply to the degree.

A minor is not required with this major; however, it is recommended that majors in sustainability consider a minor in an area of expertise that helps to ground interdisciplinary work in a focused area or discipline. It is also recommended that students secure competency in a chosen region and/or culture, tied to their choice of foreign language and study abroad experience.

Individual master plans are filed with the sustainability undergraduate adviser.

Preparation for the Major. Sustainability 100 [or Environmental Science 100]; Economics 102; Geography 101; and one course selected from Economics 201, Linguistics 270, Philosophy 120, Political Science 201, Psychology 280, Sociology 201, Statistics 119, or 250; three units from Geography 170 or Professional Studies and Fine Arts 100. (15-16 units)

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to section of catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the approved upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience Requirement. All sustainability majors are required to complete an international experience. This may involve a study abroad program, student exchange, international internship, coursework abroad, summer program, international volunteer program, or other international activity approved by the undergraduate adviser. In consultation with the undergraduate adviser, when appropriate or when accredited coursework in involved, the international experience can waive three units of the field distribution. See the undergraduate adviser to make arrangements to meet the international experience requirement.

Major. A minimum of 33 upper division units to include Sustainability 495 (three units), 12 units of integrative core courses: Sustainability 332 [or Philosophy 332]; Sustainability 353 [or Anthropology 353]; Biology 315 or Geography 370; History 441 or Sustainability 334 [or Political Science 334]; and 18 units selected from three of the following fields, at least three units of which must be 500-level courses.

Field A, Human-Nature Interface: Anthropology 355, 402, 510, Economics 455, English 305, 491 (with relevant content), History 441 (if not applied to the core), 584, International Security and Conflict Resolution 310, Philosophy 496 (with relevant content), Religious Studies 376, Sustainability 334 [or Political Science 334] (if not applied to the core), Women's Studies 580, 582. (3-12 units)
Field B, Applied and Regional Studies: Anthropology 532, Asian Studies 320, Environmental Engineering 320, Geography 340, 354, 426, 440 [or Political Science 440], 554, 572, 575, Latin American Studies 545, Oceanography 320, Political Science 564, Recreation and Tourism Management 305, 470, 487, Sociology 350, Women's Studies 580. (3-12 units)
Field C, Scientific and Analytical Thinking: Biology 315 (if not applied to the core) 324, 327, 354, 517, 540, 544 [or Environmental Science 544], Economics 455, 456, Geography 370 (if not applied to the core) $375,401,409,440$ [or Political Science 440], 454, 506, 507, 512, 554, 570, 572, 573, 574, Geological Sciences 305, Public Health 304, 362. (3-12 units)
Core courses not selected for the core may be used to satisfy the field distributions as indicated.

## Sustainability Minor*

(Minor Code: 49101) (SIMS Code: 117003)
Dr. David Carruthers (Department of Political Science) is the adviser for this minor.

The minor in sustainability consists of 15 units to include three units from Sustainability 100 [or Environmental Science 100], Geography 101, 370, Biology 315; three units from Sustainability 353 [or Anthropology 353], Sustainability 332 [or Philosophy 332], 334 [or Political Science 334], History 441; and nine additional units selected from Sustainability 332 [or Philosophy 332], 334 [or Political Science 334], 353 [or Anthropology 353], American Indian Studies 420, Asian Studies 320, Biology 324, 327, Economics 455, 456; Environmental Engineering 320; Geography 354, 409, 426, 573, Geological Sciences 303, 305, History 584, International Security and Conflict Resolution 310, Oceanography 320, Political Science 564, Public Health 302, Recreation and Tourism Management 305, 485, Religious Studies 376, Sociology 350, Women's Studies 580, 582.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.
*Additional prerequisites may be required for courses in the minor.

## Courses (SUSTN)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

## SUSTN 100. Environmental Sciences (3) [GE]

(Same course as Environmental Science 100)
The earth as an ecosystem composed of biological, chemical, and physical systems and how these systems interact with one another and the human population.

## SUSTN 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## SUSTN 299. Special Study (1-3)

Prerequisites: Consent of program director and instructor. Individual Study.

## UPPER DIVISION COURSES <br> (Intended for Undergraduates)

SUSTN 332. Environmental Ethics (3) [GE]
(Same course as Philosophy 332)
Development of traditional values concerning the natural environment. Reasons for altering values in light of modern changes in relationship of human beings to the environment. Application of ethical principles to actions affecting the environment.
SUSTN 334. Politics of the Environment (3) [GE]
(Same course as Political Science 334)
Environmental politics and policy in historical and comparative non-dominant perspective. Alternative environmental world views, cases/materials on sustainability, climate change, social and racial justice, globalization and developing nations.

## SUSTN 353. Sustainability and Culture (3) [GE]

(Same course as Anthropology 353)
Examination of efforts of anthropology to understand sustainability and provide solutions to human-environmental problems. Compares and explores sustainability in a variety of contexts and scales, from San Diego region to diverse communities around the world.

## SUSTN 495. Internship in Sustainability (1-3)

Prerequisites: Sustainability 334 [or Political Science 334] and Sustainability 353 [or Anthropology 353].

Supervised internship in campus, community, or international organizations, government agencies, or businesses where concepts and principles of sustainability can be learned experientially and put into practice. Maximum credit three units.

## SUSTN 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## SUSTN 499. Special Study (1-6)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## Teacher Education

IN THE COLLEGE OF EDUCATION

OFFICE: Education and Business Administration 255
TELEPHONE: 619-594-6131 / FAX: 619-594-7828
WEBSITE: http://go.sdsu.edu/education/ste
A Member of the American Association of Colleges for Teacher Education. Accredited by the California Commission on Teacher Credentialing and the National Council for Accreditation of Teacher Education.

## Faculty

Emeritus: Ackerly, Bee, Berg, Bezuk, Charles, Curry, Duckworth, Elliott, Erickson, Evans, Farnan, Fearn, Gast, Gega, Gibson, Hill, Hovda, Ingmanson, Kaatz, Kelly, Lapp, Littrell, Lujan, Mason, McCormack, Mehaffy, Mikitka-Gomez, Mora, Moreno, Moss, Murphy, Nagel, A., Nagel, T., Nieto, Neumann (SDSU-IV), Pang, Reel, Rixman, Ross, P., Santa Cruz, Shaw, Stautland, Strom, Tran, Treadway, Zozakiewicz
Director: Bercaw
Associate Director: Rodenberg (Interim)
Professors: Bercaw, Cappello, Chizhik, A., Chizhik, E., Gallego, Lamb, Park, Philipp, Ponce (SDSU-IV)
Associate Professors: Aquino-Sterling, Branch, Duesbery, Ross, D., Soto, Vaughn
Assistant Professors: Alonso (SDSU-IV), Johnson, Sciurba
Lecturers: Carney-Farwell, Close, Craig, Ginsberg, Lafferty, Rodenberg, Samson

## Offered by the School of Teacher Education

Master of Arts degree in education.
Master of Arts degree in mathematics education (K-8).
Master of Arts degree in reading education.
Master of Arts in Teaching degree.
Major in liberal studies with the B.A. degree
in applied arts and sciences.
Emphasis in education-generalist.
Emphasis in elementary education.
Emphasis in mathematics.
Emphasis in science.
Clear program for a professional clear credential Induction program for a professional clear credential. Multiple subject preliminary teaching credential. Reading and literacy leadership specialist credential.
Single subject preliminary teaching credential.
Reading and literacy added authorization
(refer to the Graduate Bulletin).

## The Credentials

Students in California's public schools reflect a wide variety of ethnic, linguistic, and cultural backgrounds. The School of Teacher Education is committed to preparing teachers to ensure the academic success of all students. Candidates from underrepresented groups are strongly encouraged to apply.

The Multiple Subject Credential qualifies graduates to teach in any K-12 self-contained classroom (a classroom where one teacher is responsible for teaching in all subject fields). For most, this means an elementary or middle school setting but does not preclude an alternative school or school-within-a-school (e.g., pregnant teen) setting. The credential programs includes a study of educational psychology plus a variety of methods courses in subjects commonly taught in elementary schools.

A variety of program options are available to credential candidates. Daytime commitments are required for student teaching placements. Examinations and/or coursework prerequisite to program admission, if not completed within the undergraduate degree program, may extend the total time commitment for credential issuance.

The Single Subject Credential qualifies graduates to teach in grades K-12 in a specific subject area. Most candidates prepare to teach in grades 7-12 (usually junior or senior high school) or in a middle school setting (usually grades 6-8). Students in the
program follow a sequence of courses which normally takes two semesters to complete. The first semester of the program emphasizes curriculum theory and development, educational research, and foundations of education and includes a part-time student teaching experience. The second semester focuses on a fulltime student teaching experience and accompanying seminar. The program requires a daytime commitment. A three semester program is also available. This program provides more flexibility for students who have additional responsibilities. Coursework in this program is offered in the late afternoon and evenings. Examinations and/or coursework prerequisite to program admission, if not completed within the undergraduate degree program, may extend the total time commitment for credential issuance.

## Multiple Subject (SB 2042) Credential (Elementary Education)

## (Credential Code: 00200)

## Multiple Subject - Preliminary Credential

Persons interested in teaching in the traditional elementary school will typically pursue the Multiple Subject (SB 2042) credential which authorizes teaching service in self-contained classrooms in preschools, grades K-12, and in classes organized primarily for adults (classrooms in which one teacher is responsible for all the subjects commonly taught). Recommendation for this credential requires:

1. A baccalaureate or higher degree.
2. Completion of an approved program of professional education, including student teaching and coursework in reading methods with a grade point average of 3.0 or better.
3. Basic skills competency as demonstrated through passing scores on the California Basic Educational Skills Test (CBEST).
4. Demonstrated subject matter competency by passing the Multiple Subjects examination of the California Subject Examinations for Teachers (CSET). Must have scores taken within five years prior to recommendation.
5. Successful completion of the Performance Assessment for California Teachers (PACT).
6. Passing scores on the Reading Instruction Competence Assessment (RICA).
7. Demonstrated knowledge of the principles and provisions of the United States Constitution through successful completion of a three-unit collegiate-level course. Courses are listed in the section of this catalog on "Graduation Requirements," IV. American Institutions Requirement.
8. Knowledge of health education, including substance abuse and nutrition: Teacher Education 280 or approved equivalent.
9. Demonstrated knowledge of the needs of and methods of providing educational opportunities to individuals with exceptional needs: Special Education 450 or 500.
10. Demonstrated knowledge of computer hardware, software, and applications to educational/classroom use (computer literacy).
11. Verify current training and certification in cardiopulmonary resuscitation (CPR).
NOTE: Undergraduate students in the Multiple Subject credential program may register for concurrent post-baccalaureate credit in their final semester prior to obtaining a baccalaureate degree as explained in the section of the SDSU General Catalog on "Admission and Registration."

According to SB 2042 legislation, teachers will be able to earn Professional Clear Credentials upon successful completion of a clear credential program or an induction program approved by the California Commission on Teacher Credentialing. For information about the SDSU clear and induction programs; visit the website at http://go.sdsu.edu/education/ste/apply_clear.aspx.

## Admission Standards and Qualifications for the Multiple Subject Credential Program

Candidates for the Multiple Subject Credential Program must satisfy the standards and qualifications listed below and submit an online departmental application to the School of Teacher Education. Contact the School of Teacher Education for application dates or find them at http://go.sdsu.edu/education/ste/apply_credentials_new.aspx.

Applications must verify the following:

1. CBEST Examination. Students must pass the California Basic Educational Skills Test (CBEST) prior to admission to the Multiple Subject credential program. Registration information and materials for the CBEST are available at http:// www.cbest.nesinc.com. Candidates are urged to take this examination as early as possible. Candidates are required to submit a copy of the individual score reports; uploaded to the online application.
2. Subject Matter Competency. Students must submit passing scores on the California Subject Examination for Teach-ers-Multiple Subjects (CSET-MS) in order to verify subject matter competency in diversified subjects commonly taught in self-contained classrooms. For the traditional, post-baccalaureate program (see below), test scores must be submitted prior to admission to the program. Test scores submitted for verification of subject matter competency are valid for only five years from the date the first subtest was passed and must be valid at the time of recommendation for the credential. Registration information and registration materials are available at http://www.cset.nesinc.com.
3. Prerequisite Courses. These courses or approved equivalents must be completed with grades of "C," "Cr," or better no more than seven years prior to admission to the Multiple Subject Credential Program. The courses may be in progress at the time of program application. Proof of registration is required to be considered for admission.
a. Education 451. Introduction to Multicultural Education (3)
b. Teacher Education 280. Health Education for Teachers (1)
c. Mathematics 210. Number Systems in Elementary Mathematics (3) In lieu of Mathematics 210, candidates may substitute any calculus course taken at the college or university with a grade of credit, "C," or better.
d. Special Education 450. Classroom Adaptations for Special Populations (2)
Candidates are required to submit unofficial transcripts from SDSU and official transcripts from all other colleges and universities attended including any current course-work-in-progress to verify completion of or enrollment in these courses.
4. Grade Point Average. Candidates must have attained a grade point average of at least 2.67 in all baccalaureate and post-baccalaureate coursework or a minimum 2.67 overall or 2.75 in the last 60 semester (or 90 quarter) units attempted. Candidates are required to submit official transcripts from all colleges and universities attended (with exception of SDSU) to the SDSU Graduate Admissions office for GPA calculations. Official SDSU transcripts are not required as they can be accessed via the SDSU WebPortal at http://www.sdsu. edu/portal.
5. Letters of Recommendation. Candidates must submit two letters of recommendation from individuals who know the candidate in different capacities (i.e. employer/supervisor, university professor, classroom teacher) and who can comment directly on factors such as the candidate's qualifications for a teaching career in a multicultural setting, work or educational experiences, experience teaching or supervising students or other groups of individuals, personal character, and/or potential for success as a teacher. Letters from family or friends will not be considered. These letters will be collected through our online application system. Students will need the name and e-mail address for those who will be providing a recommendation for them.
6. TB Clearance. Evidence of a negative tuberculosis test (these tests are valid for four years and must be in effect during the time that candidates are enrolled in the credential program). Clearance statements may be secured from Health Services, private physicians or HMOs, or public health agencies.
7. California Certificate of Clearance. This certificate represents a background clearance and check conducted by the State Department of Justice and Federal Bureau of Investigation. Turnaround time for the clearance can take as long as eight months or as quick as two weeks depending on one's background. Candidates must be fingerprinted through LiveScan and then submit the application directly to the California Commission on Teacher Credentialing (CCTC). The clearance must be granted on the CCTC website prior to admission to the credential program. Possessors of K-12 California credentials or Emergency Teaching Permits may satisfy this requirement with these valid credentials and will need to be kept current throughout the credential program.
8. Early Field Experience. Candidate must successfully complete an approved course with fieldwork experience OR a minimum of 45 hours of independent observation and participation in a "regular" classroom in public elementary schools. This is documented through the early field experience verification page available for downloading from the School of Teacher Education website at http://go.sdsu.edu/ education/ste/apply_credential_step_8.aspx.
9. Personal Narrative. See department website for current prompts at http://go.sdsu.edu/education/ste/apply_credential_step_9.aspx.
10. Appeals Process. Candidates who do not meet all the admission requirements may petition the Multiple Subject Admissions and Retention Committee for individual consideration; petition forms must be submitted concurrently with the application.
In addition to the minimum admissions standards identified above, the Multiple Subject Admissions and Retention Committee also may consider qualifications such as previous teaching experience, relevant working experience with children, and second language ability. Due to the number of applicants, application to the program does not ensure admission. The chancellor's office, Executive Order 1032, establishes standards for admission to teacher credential programs as follows: "The candidate shall have demonstrated personality and character traits that satisfy the standards of the teaching profession. The assessment of the candidates shall be made by the teacher education faculty of the campus, who may also consider information from public school personnel and others. The campus may use tests, observations, and interviews for this assessment."

NOTE: Appointments for discussion of individual concerns relative to the credential program may be made with the Multiple Subject Credential Program Adviser during the academic year through the School of Teacher Education, EBA-259, 619-5946320. All candidates are urged to attend one of the regularly scheduled group advising sessions prior to making an individual appointment.

## Post-Baccalaureate Multiple Subject Preparation Program

To qualify for admission, candidates must have completed (1) a baccalaureate or higher degree and (2) the Admission Standards and Qualifications for the Multiple Subject Credential Program listed above. Each student completes student teaching in two different grade levels; one assignment is at the primary level (in grades K-3) and another is at the intermediate level (in grades $4-6)$. All students enrolled in the traditional Multiple Subject Teacher Preparation Program will take the following courses.
Multiple Subject Required Courses

| Course | Units |
| :---: | :---: |
| TE 902 | Classroom Management Skills.... |
| TE 910A | Teaching Mathematics in the |
|  | Elementary School............................................... 3 |
| TE 910B | Teaching Social Studies in the |
|  | Elementary School. |
| TE 910C | Teaching Science in the |
|  | Elementary School |
| TE 923 | Psychological Foundations of Education................ 3 |
| TE 930 | Teaching Reading and Language Arts in the |
|  | Elementary School............................................. 6 |
| TE 960 | Basic Student Teaching Seminar (Cr/NC) .............. 2 |
| TE 961 | Advanced Student Teaching Seminar ( $\mathrm{Cr} / \mathrm{NC}$ )........ 2 |
| TE 965 | Basic Student Teaching in Elementary |
|  | Schools (Cr/NC)............................... |
| TE 966 | Advanced Student Teaching in Elementary |
|  | Schools (Cr/NC).................................................. 11 |
| ED 970 | Teaching Event Assessment (Cr/NC)... |
| DLE 915A | Teaching and Learning in the Content Area: |
|  | Designated and Integrated English Language |
|  | Development-Multiple Subject............................ |

## Single Subject (SB 2042) Credential (Secondary Education)

(Credential Code: 00100)

## Single Subject - Preliminary Credential

Persons interested in teaching in the traditional secondary school will typically pursue the Single Subject (SB 2042) credential which authorizes teaching service in departmentalized, subject matter classrooms in preschools, grades K-12, and in classes organized primarily for adults (classes where instruction is provided in only one subject). Candidates must verify subject matter competency in one of the following subject fields:

## Acceptable Single Subject Credential Areas and Applicable Majors

Art: Art (currently accepting applications from SDSU undergraduate majors only)
English language arts: Comparative Literature, English, Theatre Mathematics: Mathematics
Music: Music
Science: Biology, Chemistry, Physical Science
Social science: Social Science
Recommendation for this credential requires:

1. A baccalaureate or higher degree.
2. Completion of an approved program of professional education, including student teaching with a grade point average of 3.0 or better and coursework in reading methods.
3. Basic skills competency as demonstrated through passing scores on the California Basic Educational Skills Test (CBEST).
4. Demonstrated subject matter competency through completion of an approved waiver program in one of the California Single Subject areas or through California Subject Examinations for Teachers (CSET) examinations. Candidates should check with the College of Education, Office of Student Services, EBA-259, to clarify the appropriate means for satisfaction of the subject matter competency requirement in their subject matter area(s). Competency must be verified and assessed by a designated departmental adviser regardless of the means of establishing knowledge proficiency.
5. Demonstrated knowledge of the principles and provisions of the United States Constitution through successful completion of a three-unit collegiate-level course or examination. (Courses are listed in the section of this catalog on "Graduation Requirements," IV. American Institutions Requirement.)
6. Knowledge of health education, including substance abuse and nutrition: Public Health 101, or Teacher Education 280, and verification of CPR competency.
7. Demonstrated knowledge of the needs of and methods of providing educational opportunities to individuals with exceptional needs: Special Education 450 or 500.
8. Demonstrated knowledge of computer hardware, software, and applications to educational/classroom use (computer literacy).
9. Successful completion of a California Commission on Teacher Credentialing (CCTC) approved Teacher Performance Assessment (edTPA).
10. Current certification in adult, child, and infant cardiopulmonary resuscitation (CPR).
NOTE: Undergraduate students in the Single Subject credential program may register for concurrent post-baccalaureate credit in their final semester prior to obtaining a baccalaureate degree as explained in the section of the SDSU General Catalog on "Admission and Registration."

According to SB 2042 legislation, teachers will be able to earn Professional Clear Credentials upon successful completion of induction programs sponsored by their employers and approved by the California Commission on Teacher Credentialing. For information about the SDSU induction program; visit the website at https://newscenter.sdsu.edu/education/ste/clear-induction.aspx.

## Admission Standards and Qualifications for the Single Subject Credential Program

Candidates for the Single Subject Credential Program must satisfy the standards and qualifications listed below and submit an online departmental application to the School of Teacher Education. Contact the School of Teacher Education for application dates or find them at http://go.sdsu.edu/education/ste/apply_credentials_new.aspx.

Applications must verify the following:

1. CBEST Examination. Students must pass the California Basic Educational Skills Test (CBEST) prior to admission to the Single Subject Credential Program. Registration information and materials for the CBEST are available at http:// www.cbest.nesinc.com. Candidates are urged to take this examination as early as possible. Candidates are required to submit a copy of the individual score reports; uploaded to the online application.
2. Subject Matter Competency. Students must verify competency in a specified single subject area through a university assessment process which consists of reviewing coursework for completion of an approved teaching major or its equivalent at San Diego State University or another approved California teacher-training institution, passing scores on the appropriate CSET examinations. Competency will be assessed and verified by subject matter departments at SDSU. Requirements for the various single subject majors are listed with the academic majors in this catalog. Test scores submitted for verification of subject matter competency are valid for five years from the date of the examination. Information and registration materials for all current examinations are available at http://www.cset. nesinc.com.
3. Prerequisite Courses. These courses or approved equivalents must be completed with grades of "C," "CR," or better no more than seven years prior to admission to the Single Subject Credential Program. The course may be in progress at the time of program application. Proof of registration is required to be considered for admission.
a. Education 451. Introduction to Multicultural Education (3) This course provides an introduction to ethnicity, language, and culture in education, particularly the ways in which those factors differentially affect educational outcomes for children. The course assists in preparing teacher applicants to work with students from diverse backgrounds by examining both societal and personal belief systems and the ways that those beliefs are expressed in public school classrooms.
b. Teacher Education 280. Health Education for Teachers (1) This course provides topics designated in the Health Framework for California to include how to infuse health topics into the general curriculum.
c. Special Education 450. Classroom Adaptations for Special Populations (2) This course provides strategies for adapting curriculum, differentiating instruction, meeting social and behavioral needs, and modifying assessments for students with disabilities and/or gifted and talented students in general education classrooms.
4. Grade Point Average. Candidates must have attained a grade point average of at least 2.67 in all baccalaureate and post-baccalaureate coursework or a minimum 2.67 overall or 2.75 in the last 60 semester units attempted. Candidates are required to submit official transcripts from all colleges and universities attended and unofficial copies of transcripts for SDSU coursework for GPA calculations.
5. Letters of Recommendation. Candidates must submit two letters of recommendation from individuals who know the candidate well (but are not related by blood or marriage) and who can comment directly on factors such as the candidate's qualifications for a teaching career in a multicultural setting, work or educational experiences, experience teaching or supervising students or other groups of individuals, personal character, and/or potential for success as a teacher. These letters will be collected through our online application system. Students will need the name and e-mail address for those who will be providing a recommendation for them.
6. TB Clearance. Evidence of a negative tuberculosis test (these tests are valid for four years and must be in effect during the time that candidates are enrolled in the credential program). Clearance statements may be secured from Health Services, private physicians or HMOs , or public health agencies.
7. California Certificate of Clearance. This certificate represents a background clearance and check conducted by the State Department of Justice and Federal Bureau of Investigation. Turnaround time for the clearance can take as long as eight months. Possessors of K-12 California credentials may satisfy this requirement by submitting copies of those certificates. Candidates must submit the application directly to the California Commission on Teacher Credentialing. A printout from the CCTC website showing the granting of this clearance is required prior to admission; uploaded to the online application.
8. Early Field Experience. Candidate must successfully complete an approved course with fieldwork experience OR a minimum of 45 hours of independent observation and participation in a "regular" classroom in public secondary schools. This is documented through the early field experience verification page available for downloading from the School of Teacher Education website at http://go.sdsu.edu/ education/ste/apply_credential_step_8.aspx.
9. Personal Narrative. See department website for current prompts at http://go.sdsu.edu/education/ste/apply_credential_step_9.aspx.
10. Appeals Process. Candidates who do not meet all the admission requirements may petition the Single Subject Admissions and Retention Committee for individual consideration; petition forms must be submitted concurrently with the application packets.
In addition to the minimum admissions standards identified above, the Single Subject Admissions and Retention Committee also may consider qualifications such as previous teaching experience, relevant working experience with children, and second language ability. A personal interview may also be necessary. Due to the number of applicants, application to the program does not ensure admission. The chancellor's office, Executive Order 1032, establishes standards for admission to teacher credential programs as follows: "The candidate shall have demonstrated personality and character traits that satisfy the standards of the teaching profession. The assessment of the candidates shall be made by the teacher education faculty of the campus, who may also consider information from public school personnel and others. The campus may use tests, observations, and interviews for this assessment."

NOTE: Appointments for discussion of individual concerns relative to the credential program may be made with the Single Subject Credential Program Adviser during the academic year through the School of Teacher Education, EBA-259, 619-5946320. All candidates are urged to attend one of the regularly scheduled group advising sessions prior to making an individual appointment.
$\left.\begin{array}{ll}\begin{array}{l}\text { Single Subject Required Courses } \\ \text { Course }\end{array} \\ \text { TE 903 }\end{array} \quad \begin{array}{l}\text { Secondary School Student Teaching Seminar } \\ \text { (Cr/NC).......................................................................... 3-4 }\end{array}\right\}$

DLE 915B Teaching and Learning in the Content Area: Designated and Integrated English Language Development-Single Subject ..... 3

Total Units 41-44

## Information Applicable to Both Multiple Subject and Single Subject Credentials

Departmental admission to either the Multiple Subject or Single Subject credential program does not constitute admission to the university. Candidates who are entering the university for the first time, or who have graduated or who are graduating, and are planning to re-enroll for the credential program must file a separate application for admission to the university during the regular university application period.

## Advanced Standing in Teacher Education

A student transferring into San Diego State University to complete requirements for either the Preliminary or Professional Clear Multiple Subject or Single Subject credential must complete a minimum of six units of professional education coursework in residence at SDSU in order to be recommended for certification regardless of the extent of education work completed at other institutions.

## Evaluation of Credits

After an interval of five years, courses in education are reevaluated and subject to reduction in credit, in light of new requirements and changes in educational procedures. All courses taken either at this university or elsewhere must be approved by an official adviser in order to be credited toward meeting credential requirements or pattern requirements for a degree.

## GPA Requirements For Continuation in

## Multiple Subject/Single Subject Credential Programs

A grade point average of 3.0 must be maintained each semester to permit a student to continue in the Multiple Subject and Single Subject credential programs.

## Supplementary Authorizations

With completion of additional units in certain curriculum areas, both Single and Multiple Subject teachers can be granted supplementary authorizations to teach in generalized areas in middle and junior high schools (e.g., Introductory English). Single subject teaching credential candidates can also be granted supplementary authorizations to teach in specialized areas K-12 (e.g., psychology). Information on requirements for these supplementary authorizations is available through the College of Education, Office of Student Services, EBA-259.

## Description of Interdepartmental Major for Elementary Teaching <br> Liberal Studies Major

With the B.A. Degree in Applied Arts and Sciences
(Major Code: 49012)
All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

A minor is not required with this major.
Refer to the section of the catalog on "Liberal Studies" for an outline of the requirements for this major.

The following coursework is required for acceptance into the education program and may be included in the liberal studies major unless otherwise noted:

Education 451
Mathematics 210
General advising for the liberal studies major is available in the School of Teacher Education, EBA-255, 619-594-6131, and the Office of Student Services, EBA-259.

## Induction Program for a Clear Credential (Multiple and Single Subject)

The induction program offers contracted and non-contracted teachers the opportunity to obtain a professional clear credential. The year-long program provides mentored support reflecting the candidate's instructional context and needs, develops deeper understandings of pedagogy, and advances knowledge and application of current universal access to meet the needs of all students.

Interaction with faculty as a part of the coursework is fully online. Assignments include field experience that can be in your local school setting.

Prerequisite: A valid SB 2042 Preliminary Multiple or Single Teaching Subject Credential or equivalent. Clear credential program coursework cannot be taken prior to issuance of the preliminary credential. Requires verification of contracted employment by school administration before seeking approval to complete field experience in their own classrooms.*
Courses Required for the Credential (24 units)* Course Units
SPED 651 Legislation, Leadership, and Management............... 3
TE 969 Clinical Practice for Induction....................................... 3
TE 969 Clinical Practice for Induction...................................... 6
TE 969 Clinical Practice for Induction...................................... 6
TE 969 Clinical Practice for Induction...................................... 6
Special Education 651 and Teacher Education 969 (3 units) must be taken together in the first semester of the program and only one section of Teacher Education 969 can be taken during each semester, such that a non-accelerated program will take two academic years. Experienced teachers can complete the program with fewer units (accelerated path) upon approval from the program director. The accelerated path can include fewer Teacher Education 969 units per semester (using variable units) or fewer semesters, as deemed appropriate by the program director.

All coursework must be done simultaneously with contracted employment at a school site, not during vacation.

> *For questions regarding the program, contact the clear credential office at clearcredential@sdsu.edu. For details or to apply, visit http://go.sdsu.edu/ education/ste/clear_credential.aspx.

## Courses (TE)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

Note to all Multiple Subject and Single Subject credential candidates: All credential courses are listed and described in the Graduate Bulletin under the 900-series courses.

## LOWER DIVISION COURSES

TE 170. Child and Adolescent Development from a Cultural Perspective (3) [GE]
(Same course as Child and Family Development 170)
Theories of child and adolescent development using a cultural and contextual approach with emphasis on self-reflection and lifelong learning. Liberal studies premajors and majors and students seeking teaching credentials will complete Teacher Education 170; all others will complete Child and Family Development 170. Not open to students with credit in Child and Family Development 170, 270, or Psychology 230.
TE 211A. Field Experience in Mathematics (1) Cr/NC
One lecture and 15 hours of fieldwork.
Prerequisite: Recommended for sophomore or higher level students.

Guided classroom observations for prospective middle and high school mathematics teachers. Mathematics education and strategies that promote professional development. Teaching in culturally and linguistically diverse school settings.

TE 211B. Field Experience in Science (1) $\mathrm{Cr} / \mathrm{NC}$
One lecture and 15 hours of fieldwork.
Prerequisite: Recommended for students interested in pursuing a career in science teaching.

Guided classroom observations for prospective middle and high school science teachers. Science education and strategies that promote professional development. Teaching in culturally and linguistically diverse school settings.
TE 250. Informal Learning and Instruction of Mathematics and Science (3) [GE]

## (Same course as Science 250)

Two lectures and two or more hours of activity.
Theories of learning and instruction through the lens of informal mathematics and science activities. Qualitative research skills while working in after school mathematics and science programs. Design and Implementation of informal education in a service-learning environment.

## TE 280. Health Education for Teachers (1)

Topics designated in health framework for California; infusing health topics in the K-12 general curriculum. For multiple or single subject candidates. This course is offered only in the fall.

## TE 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

## (Intended for Undergraduates)

TE 303. The Teaching Profession: First Clinical Experience (3-4)
Two or three lectures and three hours of laboratory.
Prerequisites: Requires clearance for all legally mandated fingerprint requirements, tuberculosis clearance, and others as required by state and/or school districts.

Social science concepts and theories for the teaching profession; guided student observation and participation in public school classrooms.

## TE 331. Integrating Science and Pedagogy (3)

Prerequisite: Upper division standing in a science major.
Nature of science and science teaching. Integration of science content and pedagogy.
TE 362. Fieldwork in Community Settings (1-4)
One lecture and one to six hours of activity.
Prerequisites: Consent of instructor and intent to enroll in teaching credential programs.

Tutoring process and teaching strategies for the content being tutored. Maximum credit six units.
TE 402. Foundations of Education (3)

## (Offered only at SDSU-IV)

Prerequisite: Admission to multiple or single subject teaching credential program.

Combines disciplines of anthropology, economics, history, philosophy, political science, psychology, and sociology to introduce student to concepts and generalizations informing the teaching and learning process in modern classrooms.
TE 405W. Writing in Educational Settings (3)
Prerequisites: Satisfies Graduation Writing Assessment Requirement for students who have completed 60 units; completed Writing Placement Assessment with a score of 8 or higher (or earned a grade of C (2.0) or better in Rhetoric and Writing Studies 280, 281 [or Linguistics 281] if score on WPA was 6 or lower); and completed General Education requirements in Communication and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Composition of texts for K-12 educational situations and audiences. Critical reading and writing skills to support K-12 students learning.

## TE 415. Methods and Materials of Instruction (3) (Offered only at SDSU-IV)

Prerequisite: Admission to single subject teaching credential program.

Teaching concerns, instructional planning and materials, classroom management, measurement and evaluation, effective discipline, curriculum, computer literacy, special problems encountered in teaching, career planning, school-community communication processes.

## TE 462. Science Fieldwork in Community Settings (3)

Two lectures and two hours of activity.
Prerequisites: Completion of 12 units of science courses and the General Education requirement in Foundations of Learning II.A.1. Physical Sciences, or II.A.2. Life Sciences.

Science teaching and learning to include supervised fieldwork in local science classrooms.

## TE 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## TE 499. Special Study (1-3)

Prerequisite: Consent of instructor. Open only to senior and graduate students in education who have shown ability to work independently.

Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

## TE 511. Assessment in Mathematics Education (3)

Techniques to assess and develop students' mathematical understanding. For use by elementary and secondary classroom teachers and mathematics education specialists.

## TE 530. Children's/Adolescents' Literature (3)

Survey of children's/adolescents' literature and its incorporation into the classroom curriculum.

## TE 596. Topics in Teacher Education (1-3 or 6) RP*

Designed to meet the needs of individuals or groups of teachers who wish to develop or continue the study of some problem. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.
*Specified sections.

GRADUATE COURSES
Refer to the Graduate Bulletin.

# Theatre, Television, and Film 

In the College of Professional Studies and Fine Arts

OFFICE: Dramatic Arts 201
TELEPHONE: 619-594-5091 / FAX: 619-594-7431
WEBSITE: http://ttf.sdsu.edu
Accredited by the National Association of Schools of Theatre.

## Faculty

Emeritus: Anderson, Annas, Blue, Durbin, Harvey, A.C., Harvey, M., Heighton, Jones, Kalustian, Keith, Larlham, M., Larlham, P., Lee, Madsen, Martin, McKerrow, Meador, O'Donnell, Ofield, Real, Reid, Salzer, Schreiber, Simas, Wolf
Director: Coker
The Don W. Powell Chair in Scene Design: Funicello
Professors: Bliznakova, Coker, Freeman, Hopkins, Lauzen, Morong, Powell, Reinholz
Associate Professors: Alita, Bedau, Brotebeck, Cirino, Lucas, McMills, Meffe, Orr
Assistant Professors: Hu, Prudencio, Warren
Lecturers: Amon, Funicello, Lee, Jordan, McVicker, Oppenheimer, Sheehan, Shpigelman, Turner, Underwood, Voytilla

## Offered by the School

Master of Arts degree in theatre arts.
Master of Fine Arts degree in theatre arts. Concentration in acting. Concentration in design and technology. Concentration in musical theatre.
Master of Arts degree in television, film and new media production.
Master of Fine Arts degree in film and television production.
Major in theatre arts with the B.A. degree
in applied arts and sciences.
Emphasis in design and technology.
Emphasis in design for television and film.
Emphasis in performance.
Emphasis in youth theatre.
Major in television, film and new media with the B.S. degree in applied arts and sciences. Emphasis in critical studies. Emphasis in production.
Teaching major in preparation for the single subject
teaching credential in English language arts/theatre.
See Teacher Education.
Minor in theatre arts.
Minor in television, film and new media.
Certificate in entertainment management.

## The Don W. Powell Chair in Scene Design

The Don W. Powell Chair in Scene Design was established through a trust provided by the late professor emeritus. Professor Powell retired after 30 years with the theatre department and created the trust in order to enhance theatre education at SDSU. The current holder of The Don W. Powell Scene Design Chair is the nationally acclaimed designer Ralph Funicello.

## Filmmaker in Residence

The position of Filmmaker in Residence is unique in the CSU system. It was established to provide a professional link between the Television and Film program and the media industry in a rapidly evolving technological environment.

## Distinguished Visiting Artists

Through the generosity of the College of Professional Studies and Fine Arts, the School of Theatre, Television, and Film is fortunate to have distinguished theatre and film artists spend time with students and faculty each year. These guests generously share their insights and are examples for our students of the highest professional achievements. Artists and guests have included Edward Albee, Darla K. Anderson, Russell Carpenter, Kristin Chenoweth, Destin Daniel Cretton, Justin Halpern, Morgan Hay, Quiara Alegría Hudes, David McKenna, Ryan Scott Oliver, Joshua

Oppenheimer, Susan-Lori Parks, Marion Ross, Duncan Sheik, and B.D. Wong; with support from film producer Kathleen Kennedy and other alumni and benefactors.

## General Information

The School of Theatre, Television, and Film provides high quality education for undergraduate and graduate students that emphasizes excellence in the arts and technology, grounded in conceptual and historical foundations. Our students collaborate with faculty to develop and realize their creative potential as artists, global citizens, leaders, and scholars. We practice diversity, equity, and inclusion and support pluralism through theoretical explorations and practical experience in theatre, television, and film. Our pedagogical approach leads students from critical analysis through problem solving into practical action and the realization of art, scholarship, and transformational educational experiences.

## Impacted Programs

All programs in the School of Theatre, Television, and Film are impacted. To be admitted to the selected program, refer to the program description for specific impacted criteria.

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Theatre Arts Major

With the B.A. Degree in Applied Arts and Sciences
(Major Code: 10071)
All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements."

Neither a minor nor a foreign language is required with this major.

Impacted Program. The theatre arts major is an impacted program. To be admitted to the theatre arts major, students must meet the following criteria:
a. Complete with a grade of C (2.0) or better: Theatre $100^{\wedge}$, 120, 130* (or appropriate transfer equivalents). These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Have a cumulative GPA of 2.40 or better.
${ }^{\wedge}$ Theatre 100 is not required for the Emphasis in Performance.
*Theatre 130 is not required for the Emphasis in Design and Technology and Emphasis in Design for Television and Film.
The following program and emphases require coursework and GPA requirements in addition to those listed above. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ).
General Theatre Arts Program: Television, Film and New Media 160 must be completed with a grade of $C$ (2.0) or better.
Emphasis in Performance: Theatre 111 (or transfer equivalent of this course), and Theatre 332 with a GPA of 3.0 or better.
Emphasis in Design and Technology and Emphasis in Design for Television and Film: Theatre 240 (or transfer equivalent of this course) must be completed with a grade of $C$ (2.0) or better.
To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## General Theatre Arts Program

(SIMS Code: 662504)
Preparation for the Major. Theatre 100, 111, 120, 130, 205, 240, Television, Film and New Media 160 (21 units). Theatre 100, 120, 130, and Television, Film and New Media 160 must be completed with a grade of $C$ (2.0) or better and cannot be taken credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ).

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Rhetoric and Writing Studies 305 W or 500 W with a grade of $C(2.0)$ or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 33 upper division units in theatre to include Theatre 325, 359, 442A or 442B, 446A, 446B, 460A, 460B; and 15 units selected from the following sequences:
Applied Theatre and Performance: Minimum of three units selected from Theatre 310, 315, 332, 350, 351, 431, 459, 533A.
Critical Inquiry: Minimum of three units selected from Theatre 465, 525.
Design and Technical: Minimum of two to three units selected from Theatre 349, 440, 447, 448, 452, 541, 548, 549, 553, 554A, 554B.
Management: Minimum of three units selected from Theatre 335, 336, 345, 470, 476.

## Emphasis in Design and Technology

(SIMS Code: 662554)
To declare an Emphasis in Design and Technology major, in addition to the criteria for admission to the General Theatre Arts program, students must complete the following:
a. Theatre 240 (or transfer equivalent of this course) must be completed with a grade of C (2.0) or better;
b. Submit a portfolio of design work at a designated faculty review by the student's junior year. See undergraduate design adviser for details. A transfer student who wishes to qualify for major status may do so at the end of the first semester. A student must provide a letter of support from a previous college or university if no design work is available.
Preparation for the Major. Theatre 100, 115 (recommended) or 130, 120, 240, Television, Film and New Media 160 (15 units). Theatre 100, 120, and 240 must be completed with a grade of $C(2.0)$ or better and cannot be taken credit/no credit (Cr/NC).

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Rhetoric and Writing Studies 305 W or 500W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 39 upper division units in theatre to include Theatre 325, 359, 440 or Television, Film, and New Media 350, Theatre 442A or 442B, 446A or 446B, 447, 449, 452, 460A, 460B, 530A or 530B; and six units selected from Theatre 335, 490, 540, 547, 548, 552, 561, Television, Film, and New Media 550, 551, 558, 559, international exchange option; and four units selected from Theatre 349, 539, 541, 542, 544, 545, 546, 549, 550, 551, 554A, 554B, 556, 557, 564.

## Emphasis in Design for Television and Film

(SIMS Code: 662564)
To declare an Emphasis in Design for Television and Film, in addition to the criteria for admission to the General Theatre Arts program, students must complete the following:
a. Theatre 240 (or transfer equivalent of this course) must be completed with a grade of C (2.0) or better;
b. To advance from premajor into the major, submit a portfolio of design work (see undergraduate design adviser for details).
Preparation for the Major. Theatre 100, 111 or 115, 120, 240, Television, Film and New Media 160 (15 units). Theatre 100, 120, and 240 must be completed with a grade of $C(2.0)$ or better and cannot be taken credit/no credit (Cr/NC).

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Rhetoric and

Writing Studies 305W or 500W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 41 upper division units in theatre to include Television, Film and New Media 350, 550, Theatre 325, 359, 440, 442A or 442B, 446A, 446B, 447, 452, 460A, 460B, 530A or 530B; and three units selected from Television, Film and New Media 401, 551 , Theatre $490,540,547,548,552$, and two units selected from Theatre 448, 539, 541, 545, 546, 549, 550, 554A, 554B.

## Emphasis in Performance

(SIMS Code: 662595)
To declare an Emphasis in Performance, in addition to the criteria for admission to the General Theatre Arts program, students must complete the following:
a. An audition is required for this emphasis. Visit http://ttf. sdsu.edu/index.php/degree_programs/theatre/audi-tion-requirements-for-performance-majors for detailed requirements.
b. Theatre 111 (or transfer equivalent of this course) and Theatre 332;
c. GPA of 3.0 or better in the above courses.

For further information, visit
http://ttf.sdsu.edu/index.php/degree_programs/theatre/
audition-requirements-for-performance-majors.
Preparation for the Major. Theatre 111, 120, 130, 205, 231, 240, Television, Film and New Media 160 (21 units). Theatre 120, 130, 231 , and 240 must be completed with a grade of $C(2.0)$ or better and cannot be taken credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ). Theatre 111 and 332 must be completed with a GPA of 3.0 or better.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Rhetoric and Writing Studies 305W or 500W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience Requirement. Completion of a study abroad or experience abroad selected from the CSU/SDSU Study Abroad Program; SDSU Exchange Program; SDSU Semester Abroad Program; SDSU Study Travel Program; or SDSU approved Study Abroad Program offered by other accredited institutions.

Major. A minimum of 32 upper division units in theatre to include Theatre 325, 332, 355, 446A, 446B, 446C (two units), 460A, 460B; 12 units selected from Theatre 320A, 350, 351, 359, 431, $434,435,450,451,532,533 A$. All performance emphasis majors are required to participate in general auditions each semester.

## Emphasis in Youth Theatre <br> (SIMS Code: 662527)

Preparation for the Major. Theatre 100, 111, 120, 130, 240, Television, Film and New Media 160 (18 units). Theatre 100, 120, and 130 must be completed with a grade of $C(2.0)$ or better and cannot be taken credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ).

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or Rhetoric and Writing Studies 305 W or 500 W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 31 upper division units to include Theatre 310, 315, 325, 359, 446A, 446B, 460A, 460B, 510, 580; and three units selected from Theatre 335, 336, 440, 447, 452, 459, 470, 476.

## Television, Film and New Media Major

With the B.S. Degree in Applied Arts and Sciences

## (Major Code: 06031)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." To complete the television, film and new media major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Emphasis in Critical Studies (SIMS Code: 667308)

The emphasis in critical studies guides students in the study of the history, theory, aesthetics, and cultural significance of film, television and new media. This emphasis offers a degree, which can be used for many different career paths, including graduate study, media industry coordination and production work.

Impacted Program. The emphasis in critical studies is designated as an impacted program. To be admitted to the television, film and new media major with an emphasis in critical studies, students must meet the following criteria:
a. Have a cumulative GPA of 3.0 or better;
b. Complete with a grade of B (3.0) or better: Theatre 100, 120, Television, Film and New Media 110, 160.
These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ).
Preparation for the Major. Theatre 100, 120; Television, Film and New Media 110, 160. (12 units) These prerequisite courses must be completed with a grade of $\mathrm{B}(3.0)$ or better and cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ).

Students completing the California Community College Associate in Science in Film, Television, and Electronic Media for Transfer (AS-T) are required to complete the following equivalent courses at the community college or at SDSU if not completed as part of the AS-T: Television, Film and New Media 110 and 160, Theatre Arts 100 and 120.

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or Rhetoric and Writing Studies 305W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 39 upper division units to include Television, Film and New Media 310, 330, 363, 364A, 364B, 563; nine units selected from Television, Film and New Media 470, 530, 571, 573; and 12 units selected from Television, Film and New Media 401, 430, 490, 499, Africana Studies 465 [or French 465], American Indian Studies 435, Anthropology 439, Chicana and Chicano Studies 400 [or Latin American Studies 400], Classics 350, English 577, European Studies 424, German 320, History 436, Religious Studies 364, or Theatre 460A, 460B, 465. A minor is not required with this major.

## Emphasis in Production

## (SIMS Code: 667304)

The emphasis in production prepares students for professions in television, film and new media. The emphasis also serves those in occupations where extensive knowledge is required of message design for these media and their various distribution systems. This program focuses on skills required for careers as art directors, cinematographers, directors, editors, producers, production assistants, and writers, as well as emerging careers in new media production.

Impacted Program. The emphasis in production is designated as an impacted program. To be considered for admittance to the television, film and new media major with an emphasis in production, students must meet the following criteria:
a. Complete with a grade of $B(3.0)$ or better: Theatre 100 and Television, Film and New Media 160. Complete with a grade of $C$ (2.0) or better: Television, Film and New Media 110, Theatre 120, and three units from Art 157, 258, 259, Music 151, Theatre 115 or 130. These courses cannot be taken for credit/no credit (Cr/NC);
b. Submit a personal statement to be evaluated by the faculty;
c. Submit two letters of recommendation to be evaluated by the faculty;
d. Have a cumulative grade point average of 3.0 or better;
e. Submit samples of visual creative work;
f. Submit a treatment for a 1-3 minute production (fiction or nonfiction).
For further information, visit http://ttf.sdsu.edu/index.php/ degree_programs/tfm/tfm-undergraduate-petitioning-process.

Preparation for the Major. Television, Film and New Media 110, 160; Theatre 100, 120; and three units from Art 157, 258, 259, Music 151, Theatre 115 or 130. ( 15 units) Television, Film and New Media 160 and Theatre 100 must be completed with a grade of B (3.0) or better and cannot be taken credit/no credit (Cr/NC). Television, Film and New Media 110, Theatre 120, and three units from Art 157, 258, 259, Music 151, Theatre 115 or 130 must be completed with a grade of $\mathrm{C}(2.0)$ or better and cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ).

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or Rhetoric and Writing Studies 305W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

Major. A minimum of 42 upper division units to include 30 units from Television, Film and New Media 310, 314, 330, 361, 362, 364A or 364B, 401, 510, 540, 560; six units selected from Television, Film and New Media 321, 322, 327, 350, 465, 490, 499, 522, 550, 551, 559, 561, 590, or Theatre 359; six units selected from Television, Film and New Media 363, 364A or 364B, 430, 470, 530, 563, 571 or 573. A minor is not required with this major.

## Theatre Arts Minor

(Minor Code: 10071) (SIMS Code: 662504)
The minor in theatre arts consists of 23-24 units in theatre to include Theatre $100,120,130,205,240,460 \mathrm{~A}$ or 460 B ; three units selected from Theatre $325,350,431,476$; and two to three units selected from Theatre 315, 335, 345, 355, 442A, 442B, or 525.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and General Education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

## Television, Film and New Media Minor

## (Minor Code: 06031) (SIMS Code: 667306)

The minor in television, film and new media is designed for students in business, English, music, prelegal, theatre, or other majors related to the writing, production, and distribution of media. The minor consists of a minimum of 24 units to include Theatre 100; Television, Film and New Media 110, 160, 310, 330; six units selected from Television, Film and New Media 363, 364A, 364B, 430, 563; and three units selected from Television, Film and New Media 470, 530, 571, 573. Admission to the Television, Film and New Media minor requires completion of at least 30 units with a minimum grade point average of 3.0 overall and completion of Theatre 100 and Television, Film and New Media 160 with grades of $B(3.0)$ or better.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed at San Diego State University.

## Entertainment Management Certificate

## (SIMS Code: 662541)

The basic certificate in entertainment management provides students with specialized knowledge and skills in the area of backstage management of people and technology in the performing arts. Students study and gain experience in stage, production, event management, and business principles of television and film or marketing entertainment. These areas provide a foundation of knowledge for entry-level career positions in managerial and business environments in the creative, cultural, and events industries.

Courses are for preprofessionals in the theatre, television, film, and entertainment industries who want to expand their knowledge of management and production. The certificate is for students who want to pursue careers as producers, managers, entrepreneurs, in the areas of live performing arts, as well as professionals in adjacent fields of the not-for-profit performing arts disciplines, and in arts management and production. Students in management and business can apply this certificate to the arts and entertainment industries. For additional information, contact Jay Sheehan, 619-594-4990.

The certificate requires completion of 15 units to include Theatre 240 and 12 units selected from the following courses:
THEA 335 Stage Management-Theory .......................................... 3
THEA 336 Stage Management-Practicum .................................... 3
THEA 345 Theatre Marketing and Publicity ................................. 3
THEA 476 Event Coordination and the Entertainment Industry.
... 3
TFM $401 \quad$ Business Aspects of Television and Film Production. 3

## Courses (THEA AND TFM)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES IN THEATRE (THEA)

THEA 100. The Art of Theatre (3) [GE]
Introduction to theatre as a reflection of society and a contributor to the world of art. Students explore theatre's continuing relevance to contemporary culture. Attendance at selected theatre events required.

## THEA 111. Voice and Movement (3)

Prerequisite: Open to majors in the School of Theatre, Television, and Film only.

Project-based preparation of physical and vocal instrument for acting. Not open to students with credit in Theatre 110.
THEA 115. Acting for Nonmajors (3)
Improvisational exercises (verbal and nonverbal) in sensory awareness, observation, concentration, listening, and response skills with application to other fields. Individual presentation techniques for the preprofessional in other disciplines.

## THEA 120. Heritage of Storytelling (3) [GE]

Three lectures and attendance at selected performances.
Survey of significant concepts over a wide history of theatre, television, and film. Analysis of classical, contemporary, realistic, and avant-garde examples; exploring influence of historical narrative forms on contemporary storytelling.

## THEA 130. Acting I (3)

Development of individual's ability to express thought and emotion through effective use of the voice and body. These fundamental concepts may be applied to stage, film, and television acting.
THEA 205. American Musical on Stage and Screen (3) [GE]
Shows, films, and performers that trace the evolution of this unique American art form from its origins to contemporary Broadway, film, and pop culture, utilizing live performance and digital media.
THEA 231. Acting II (3)
Prerequisites: Theatre 111 and 130.
Continuation of Theatre 130, emphasizing application of fundamental skills to problems of text analysis, subtext, playing action, characterization, and ensemble work.
THEA 240. Theatre Design and Technology I (3)
Two lectures and three hours of laboratory.
Prerequisite: Theatre 120. Proof of completion of prerequisite required: Copy of transcript.

Design, technical practices, and production organization for the theatre. Not open to students with credit in Theatre 240A, 240B, or 240C.

## THEA 296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.
THEA 299. Special Study (3)
Prerequisite: Consent of School of Theatre, Television, and Film director, and instructor.

Individual study.

## UPPER DIVISION COURSES IN THEATRE

(Intended for Undergraduates)

## THEA 310. Creative Drama I (3)

Current philosophies, principles, and techniques of creative drama. Development of the individual through use of dramatic play, imagination, improvisation, and theatre games. Applicable to classroom teaching, counseling, recreation, and senior citizen programs.

## THEA 315. Theatre for Young Audiences (3)

Current philosophies and practices in theatre for young audiences. Techniques of selecting and producing plays for and with youth. Theatre styles, script analysis, and functions of the production team.

## THEA 320. Advanced Voice and Text for Actors (3)

Prerequisites: Theatre 111, 130; or by audition.
Techniques of vocal expression in the theatre, primarily in plays with heightened and elevated speech, e.g. Shakespeare and classic Greek drama.
A. Select Heightened Speech From the Greeks to Today

THEA 325. Script Analysis (3)
Prerequisites: Theatre 120, completion of lower division writing competency requirement, and upper division standing. Proof of completion of prerequisites required: Copy of transcript.

Analysis of representative plays with emphasis on plot and character development, dramatic structure, action, and style.

## THEA 332. Acting III (3)

Prerequisites: Theatre 130, 231, and by audition.
Continuation of Theatre 130 and 231, emphasizing analysis of literary text in process of creating characters. Scene study and role preparation of significant texts by modern playwrights. May be repeated once with consent of instructor.
THEA 335. Stage Management-Theory (3)
Prerequisite: Theatre 240.
Development of the prompt script, organizational methods, and collaborative personnel interaction. Maximum credit six units.

## THEA 336. Stage Management-Practicum (3)

Six hours of activity.
Prerequisite: Theatre 240.
Practical experience in stage managing department productions. Maximum credit six units.
THEA 345. Theatre Marketing and Publicity (3)
One lecture and four hours of activity.
Prerequisite: Theatre 100.
Practical experience in marketing and publicity for theatres, including PSAs, press releases, layout-graphics for written materials, magazine and newspaper advertisements, marketing strategy and campaign development for a full theatre season.

## THEA 349. Theatrical Makeup (2)

Two hours per unit.
Prerequisite: Theatre 240.
Planning and application of makeup for stage, film, and television. Classroom exercises and production-related activities.
THEA 350. Musical Theatre Performance I (3)
Two lectures and three hours of laboratory.
Prerequisite: By audition.
Basic performance techniques in musical theatre. Application of acting theory to musical theatre literature. Maximum credit six units.
THEA 351. Musical Theatre Performance II (3)
Two lectures and three hours of laboratory.
Prerequisites: Theatre 350 and by audition.
Basic performance techniques in musical theatre. Vocal/performance style and vocal production related to period/style musical theatre literature, solo/group/audition presentation. Maximum credit six units.
THEA 353. Musical Theatre Dance (2)
Two hours of activity per unit.
Musical theatre dance techniques to include classic jazz and ballet. Movement vocabulary and choreographic styles utilized in musical theatre production. Maximum credit 16 units.

THEA 355. Movement for the Theatre I (2)
Two hours of activity per unit.
Prerequisite: By audition.
Activities to develop physical skills of the performer. Links between imagination, movement, and body expression leading to character development. Maximum credit four units.

## THEA 359. Directing I (3)

Prerequisites: Theatre 240, 325; or Television, Film and New Media 314. Proof of completion of prerequisites required: Copy of transcript.

Principles and techniques of directing for the stage: play selection, analysis, and interpretation; casting methods; stage composition and movement; and rehearsal procedures.
THEA 431. Workshop in Improvisational Acting (3)
Prerequisites: Theatre 332 and by audition.
Theories and principles of improvisational acting.
THEA 434. Audition and Business Skills for the Actor (3)
Two lectures and two hours of activity.
Prerequisite: Theatre 332.
Auditioning and interviewing for stage and screen; selecting audition pieces, rehearsing, performing auditions. Business skills of audition process; researching individual marketability, branding, networking to secure auditions and representation.

## THEA 435. Acting on Camera (3)

Two lectures and two hours of activity.
Prerequisites: Theatre 111, 120, 130; Television, Film and New Media 160.

Director-actor-camera collaborations in rehearsal and performance, using single or multi camera television technique. Techniques for preparing and performing monologues and scenes with practical experience in front of and behind the camera.
THEA 438. Shakespeare Touring Production (2) $\mathrm{Cr} / \mathrm{NC}$
Four hours of activity.
Prerequisites; Theatre 100, 120; Television, Film and New Media 160.

Participate in high school outreach touring production.
THEA 440. Scene Design I (3)
Two lectures and three hours of laboratory.
Prerequisites: Theatre 240, 325.
Techniques and procedures in application of design, color, and perspective in designing scenery.
THEA 442. Practicum in Theatrical Production (2)
Two hours of activity per unit.
Prerequisite: Theatre 240.
Technical theatre production experience for departmental public performances.
A. Scenery Construction
B. Costume Construction

THEA 446. Practicum in Performance (446A-446B: 2 units) (446C: 1-3 units $\mathrm{Cr} / \mathrm{NC}$ )
One lecture and two hours of activity for 446A and 446B.
Two hours per unit for 446C.
Prerequisite for 446A and 446B: Theatre 240.
Prerequisite for 446C: By audition.
Practical experience in departmental public performances.
A. Stage Crew. Maximum credit four units for Theatre 446A.
B. Costume Crew. Maximum credit four units for Theatre 446B.
C. Cast Member. Maximum credit 16 units for Theatre 446C.

## THEA 447. Lighting Design I (3)

Two lectures and three hours of laboratory.
Prerequisites: Theatre 240, 325.
Concepts and technologies in lighting for theatre and related performance areas. Emphasis on mechanics of stage lighting, color, instruments, and control. Laboratory and production related activities.

THEA 448. Theatre Technology (2)
Four hours of activity.
Prerequisite: Theatre 240.
Current materials and practices of theatre technology. Advanced construction techniques; stage machinery design and control; special effects; computer applications for stage operations; budget, research, and management procedures.
THEA 449. Portfolio Preparation and Exit Interview (1)
Prerequisites: Senior standing and Theatre 440, 447, or 452.
Transition to the industry of design and technology for theatre, television, and film by examining the self-marketing materials required to enter the workforce after graduation. Culmination in exit interview.
THEA 450. Musical Theatre Performance III (3)
Two lectures and three hours of laboratory.
Prerequisites: Theatre 351 and by audition.
Advanced rehearsal/performance techniques in musical theatre. Performance style, vocal production, and staging relating to musical theatre literature: duet and small group presentation. Maximum credit six units.
THEA 451. Musical Theatre Performance IV (3)
Two lectures and three hours of laboratory.
Prerequisites: Theatre 450 and by audition.
Advanced rehearsal/performance techniques in musical theatre. Collaboration, performance preparation, acting/singing styles, vocal production, and staging that result in a final performance for an audience. Maximum credit six units.
THEA 452. Costume Design I (3)
Two lectures and three hours of laboratory.
Prerequisites: Theatre 240, 325.
Theory and creative application of principles of costume design for various types of production. Emphasis on concept development, character interpretation, research methods, color organization, and fabric selection. Laboratory and production related activities.
THEA 459. Directing II (3)
Two lectures and two hours of activity.
Prerequisites: Theatre 359 and consent of instructor.
Experience and group evaluation in directing one-act plays before an audience. Attendance at selected public performances required. Maximum credit six units.
THEA 460A-460B. History of the Theatre (3-3) [GE]
Theatre from ancient times to the present. Special attention given to the theatre as a mirror of the social and cultural background of various countries and periods in which it is studied. Theatre 460A is not prerequisite to Theatre 460B.

## THEA 465. Theatre of Diversity (3) [GE]

Prerequisite: Theatre 325 for theatre majors.
Racial, ethnic, political, and social diversity of American landscape as reflected in works of major playwrights of diversity.
THEA 470. Facility Operations and Management for Theatre (3) Prerequisite: Theatre 240.
Leadership, managing creative teams, budgeting, scheduling, liability and safety, co-producing, special event and corporate entertainment production management. Front of house operations to include house management, box office operations, ticketing, budgeting and reporting. Maximum credit six units.
THEA 476. Event Coordination and the Entertainment Industry (3)
Two lectures and two hours of activity.
Prerequisite: Theatre 240.
All aspects of producing special events, including venue designs and planning, managerial roles of entertainment industry, and how venue planning affects business decisions of these various managers.

## THEA 490. Theatre Internship (1-3) $\mathrm{Cr} / \mathrm{NC}$

Prerequisite: Theatre 325; internship contract must be completed prior to registration.

Work with approved theatre organizations off-campus under the combined supervision of theatre personnel and instructors. Maximum credit three units.

## THEA 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## THEA 499. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES IN THEATRE

(Also Acceptable for Advanced Degrees)
THEA 510. Creative Drama and Language Arts (3)
Prerequisite: Theatre 310 or 315 .
Advanced techniques in using creative drama to teach literature and language. Emphasis on use of drama in teaching of reading and world literature. Practical experience through fieldwork in elementary or middle school classrooms.

## THEA 515. Playwriting (3)

Prerequisite: Theatre 325 or graduate standing.
Writing for the stage and public presentation. Characterization, dialogue, and formal experimentation when writing short plays.

## THEA 525. Dramaturgy (3)

Prerequisite: Theatre 325 or graduate standing.
Theory and application of various aspects of dramaturgy and theatre literary management. Production-oriented synthesis of advanced text analysis, dramatic theory and criticism, historical research, and dramatic literature. Attendance at select plays required. May be repeated with new content. Maximum credit six units.

## THEA 530. Period Dress and Decor (3)

Prerequisite: Theatre 240 or graduate standing.
Visual survey of relationships and cultural significance of period dress, architecture, and decorative arts as applied to theatrical productions. Emphasis on significant historic periods in dramatic literature. Theatre 530A is not open to students with credit in Theatre 530.
A. Ancient World Through Eighteenth Century
B. NeoClassical Through Twentieth Century

THEA 532. Advanced Topics in Stage and Screen Performance (3)
Two lectures and two hours of activity.
Prerequisites: Theatre 332 and either Theatre 320 or 355.
Theory and practice in performance from theatre, television, and film to include physical theatre, voice and speech, film and theatre performance styles, intercultural theatre, devised work. May be repeated with new content. Maximum credits six units.
THEA 533A. Theory and Styles in Acting and Directing I (3)
Prerequisites: Theatre 332 and either Theatre 320 or 355.
Acting and directing problems in theory and style related to the production of plays from great periods in theatre history, with attention to characterization, dramatic values, creative directing, and production approaches.
THEA 539. Theatre Rendering (2)
Four hours of activity.
Prerequisite: Theatre 240.
Rendering for scenic, costume, and lighting designers. Techniques, media, and portfolio preparation. Maximum credit four units.
THEA 540. Scene Design II (3)
Prerequisites: Theatre 440 and 530A or 530B.
History of scene design and application of contemporary styles to various types of dramatic productions.
THEA 541. Scene Painting (2)
Four hours of activity.
Prerequisite: Theatre 530A or 530B.
Theories and techniques of scene painting, including both historical backgrounds and modern procedures. Full-scale projects executed in scenery studio.

THEA 542. Studio Skills for Theatre: Model Making (2)
Four hours of activity.
Prerequisite: Theatre 240 or admission to the M.F.A. in design and technology.

Traditional model-making for scenic designers. Media, presentation, and techniques of work.

## THEA 544. Advanced Stage Technologies (2)

Four hours of activity.
Prerequisite: Theatre 240.
Design and fabrication of stage machinery and special effects. Computer-based automation and controls, electro-mechanical systems, and programmable logic controllers. Current U.S. and European machinery standards and safety systems. Maximum credit six units.

## THEA 545. Mechanical Drawing for the Theatre (2)

Four hours of activity.
Prerequisite: Theatre 240 or admission to the M.F.A. in design and technology.

Theatre drafting standards and techniques. Floor plans, sections, elevations, perspective drawings, and light plots.
THEA 546. CADD for the Theatre (2)
Four hours of activity.
Prerequisite: Theatre 545.
Computer aided drafting applications for theatre designers.
THEA 547. Lighting Design II (3)
Two lectures and three hours of laboratory.
Prerequisite: Theatre 447.
Advanced design theories and lighting practice for theatre and dance. Laboratory and production related activities.
THEA 548. Sound Design for the Theatre (3)
Two lectures and two hours of activity.
Prerequisites: Theatre 240, 325, or Music 360, 460.
Theories and techniques of sound design and reinforcement for theatrical performance. Laboratory experience in sound production.

## THEA 549. Lighting and Sound Technology (2)

One lecture and three hours of laboratory.
Prerequisite: Theatre 447.
Use of electrics for the stage. Lighting, sound, computer. Practical applications emphasized.

## THEA 550. Software for Theatrical Design (2)

Four hours of activity.
Prerequisite: Theatre $440,447,452$, or 546.
Application of computer software for theatre, including scenery,
costume, lighting, and sound design. Maximum credit four units.
THEA 551. Advanced Media Design (2)
One lecture and three hours of laboratory.
Prerequisite: Theatre 550 or admission to the M.F.A. in design and technology.

Digital media creation for theatrical use. Creation of video content for projection design and integrated media. Advanced digital painting of theatrical renderings. Maximum credit six units.
THEA 552. Costume Design II (3)
Prerequisites: Theatre 452 and 530A or 530B.
Advanced studies in costume design. Emphasis on theatrical style, rendering layout, design problems, materials, and budget.

## THEA 553. Technical Direction (3)

Two lectures and two hours of activity.
Prerequisite: Theatre 442A or 442B.
Modern technical direction including project management (budgeting and procurement, managing employees); design and engineering; automation, rigging, advanced stagecraft (metalcraft, CNC machinery, composite construction), and safety. Maximum credit six units.

THEA 554A. Costume Design Technology I (2)
Four hours of activity.
Prerequisites: Theatre 240 and $442 B$ or admission to the M.F.A. in design and technology.

Current materials and practices of costume technology: advanced construction techniques, fabric selection and use, period pattern drafting, draping, and cutting. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

## THEA 554B. Costume Design Technology II (2)

Four hours of activity.
Prerequisite: Theatre 240 or admission to the M.F.A. in design and technology.

Advanced costume craft construction techniques and management procedures for costume production: millinery, fabric dyeing and painting, jewelry, and related crafts. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.
THEA 555A. Movement for the Theatre II (2)
Four hours of activity.
Prerequisites: Theatre 332 and 355.
Movement techniques for the theatre. Movement patterns, phrase development, and partnering leading to scene work. Maximum credit four units.

## THEA 555B. Movement for the Theatre II (2)

Four hours of activity.
Prerequisites: Admission to the M.F.A. in musical theatre. Consent of instructor for undergraduates.

Musical theatre movement and dance styles. Maximum credit eight units.
THEA 556. Digital Communication for Lighting Design (2)
One lecture and three hours of laboratory.
Prerequisite: Theatre 447 or admission to the M.F.A. in design and technology.

Application of Lightwright, Vectorworks, and other industry-standard software programs to produce 2D/3D light plots, 3D lighting renderings, and professional quality lighting design package documentation. Communication techniques, drawing organization, and industry practices.

## THEA 557. 3D Fabrication for Entertainment Design (2)

One lecture and three hours of laboratory.
Prerequisite: Theatre 240 or admission to the M.F.A. in design and technology.

Theory and practice of basic principles of 3D printing and scanning for theatrical use. Basics of fused deposition modeling manufacture. Sourcing and creating 3D models. Creation and realization of original work.

## THEA 561. Projection Design and Integrated Media (3)

Two lectures and three hours of laboratory.
Prerequisites: Theatre 550 and 551 or admission to the M.F.A. in design and technology.

Designing projections and integrated media for theatrical productions.

## THEA 564. Costume Topics (1-3)

Prerequisite: Theatre 452, Television, Film and New Media 160, or admission to the M.F.A. in design and technology.

Fashion for costume design, Hollywood costume design in the past century, origins of modern menswear, psychology and meaning of dress. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.
THEA 570. Practicum in Theatrical Production (1-3)
Prerequisite: Theatre 440, 447, or 452; or admission to the M.F.A. in design and technology.

Design projects in areas of scenery, costume, lighting, sound, or makeup. Maximum credit six units for Theatre 570A and six units for Theatre 570B.
A. Independent Study
B. Design for Department Public Performances

THEA 580. Theatre in the Classroom (3)
Prerequisites: Theatre 310 and 315.
Methods of teaching theatre in elementary, middle, and secondary schools. Emphasis on pedagogy, organization of curriculum, play selection, and principles of producing plays in the classroom.
THEA 596. Selected Topics in Theatre (1-3)
Prerequisites: Twelve units in theatre.
A specialized study of selected topics from the areas of theatre. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## LOWER DIVISION COURSES IN TELEVISION, FILM AND NEW MEDIA (TFM)

TFM 110. Writing for Television and Film (3)
Prerequisite: Satisfaction of the SDSU Written Communication Assessment requirement. Proof of completion of prerequisite required.

Theory and practice in writing for electronic and film media. Introduction to techniques of narrative and documentary writing and scripting.

## TFM 160. Cinema as Art (3) [GE]

Cinema in its diverse forms. Historical and stylistic influences on aesthetic values and social implications of cinema.

## UPPER DIVISION COURSES IN TELEVISION, FILM AND NEW MEDIA

(Intended for Undergraduates)
TFM 310. Film, Television, and New Media Criticism (3)
Prerequisite: Television, Film and New Media 160.
Critical approaches to study of film, television, and new media. Analyses of media perspectives, to include ideology, semiotics, genre, gender, and spectatorship.
TFM 314. Film and Video Production (3)
Two lectures and three or more hours of activity.
Prerequisite: Open to television, film and new media majors only.
Aesthetics and practice of film and video production techniques. Instruction in equipment use combined with consideration of aesthetics, visual storytelling, and craft. Attention to development of creative voice and original work.
TFM 321. Sound Design for Video and Film (3)
Two lectures and two hours of activity.
Digital audio post-production for video, TV, and film. Includes field acquisition, Foley, editing, and assembling.
TFM 322. Cinematography for Television and Film (3)
Two lectures and two hours of activity.
Prerequisite: Television, Film and New Media 314.
Basic cinematography to include introduction to filmmaking activities, lighting techniques for film and television, specialized studio and location equipment. Exhibitions to include broadcasts, film festivals, and special screenings.
TFM 327. Film and Video Editing (3)
One lecture and four hours of activity.
Prerequisite: Television, Film and New Media 314 (or consent of instructor).

Theory and practice of film and video editing.
TFM 330. Cultural Aspects of Media (3)
Prerequisite: Television, Film and New Media 160.
Cultural dimensions of media. Media structures, uses, and effects at national and international levels in a context of humanities and conceptual arts.

## TFM 350. Staging and Art for Television and Film (3)

One lecture and six hours of activity.
Aesthetic considerations and technical practices in staging, lighting, and graphics for television and film. Practical experience in university sponsored productions.

## TFM 361. Studio Production (3)

Two lectures and more than three hours of activity.
Prerequisite: Television, Film and New Media 314 (or consent of instructor).

Multi-camera television production techniques for studio, sound stage, and remote multi-camera production. Responsibilities of producer, director, and production staff.
TFM 362. Intermediate Filmmaking (3)
Two lectures and more than three hours of activity.
Prerequisite: Television, Film and New Media 361.
Single camera techniques in production of narrative fiction. Crew-based location and studio production. Responsibilities of producer, director, and key creative production positions. (Formerly numbered Television, Film and New Media 360 [previously Television, Film and New Media 260.])
TFM 363. International Cinema (3) [GE]
Construction of foreign film to history and practice of cinema as an art. Film as an expression of national culture. Maximum credit six units of which three units may be applicable to General Education. May be repeated with new content. See Class Schedule for specific content.
TFM 364. History of Film Classics (3-3)
Prerequisite: Upper division standing.
Viewing and analysis of American and foreign theatrical films which represent milestones in development of cinema. Maximum credit six units from Television, Film and New Media 364, 364A, and 364B.
A. Early Developments Through the 1950s
B. 1960s Through Today's Cinema

TFM 365. New Media Production (3)
Two lectures and three hours of activity.
Prerequisite: Art 348.
Production and visualization of 3D cinematic environments and characters for immersive story driven and interactive media.
TFM 401. Business Aspects of Television and Film Production (3)
Prerequisite: Television, Film and New Media 361 or 362. Usually taken concurrently with Television, Film and New Media 560 or 561. Proof of completion of prerequisites required: Copy of transcript.

Financing, preproduction planning, postproduction, and distribution of television and film.
TFM 430. History of Prime-Time Television (3) [GE]
History, trends, and dynamics in the programming of prime-time network television. External and internal forces that influence what we watch.

## TFM 465. Compositing and Visual Effects (3)

Two lectures and three hours of activity.
Prerequisite: Television, Film and New Media 365.
Computer-generated visual effects to include rendering and compositing techniques used in film, new media, and television.
TFM 470. Critical Studies of Gender/Sexuality/Media (3)
Prerequisites: Television, Film and New Media 310 and 330. Open to television, film and new media majors in upper division standing.

Critical approaches to representation, production, and reception of gender and sexuality in film, television and new media, including video games and the Internet.
TFM 490. Internship (1-3) Cr/NC
Prerequisite: Television, Film and New Media 314 (or consent of instructor).

Work with approved agencies off-campus under the combined supervision of agency personnel and instructor. Maximum credit six units.

TFM 496. Experimental Topics (1-3)
Prerequisites: Upper division standing and consent of instructor. Experimental topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.
TFM 499. Special Study (1-3)
Prerequisite: Television, Film and New Media 314 (or consent of instructor).

Individual study or project, normally in a research area selected by the student. Maximum credit six units.

## UPPER DIVISION COURSES IN TELEVISION, FILM AND NEW MEDIA

(Also Acceptable for Advanced Degrees)
TFM 510. Advanced Script Writing for Television and Film (3)
Prerequisite: Television, Film and New Media 314 (or consent of instructor).

Scripting of dramatic original and adaptation forms, and documentary. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.
TFM 522. Advanced Film and Television Cinematography (3)
Two lectures and two hours of activity.
Prerequisite: Television, Film and New Media 314 (or consent of instructor).

Art, craft, and industry of cinematography. Telling visual stories with video and film. Attributes and optics of lenses. Qualities and aesthetics of lighting.
TFM 530. Selected Topics in Genre Studies for Television and Film (3)
Prerequisites: Television, Film and New Media 310 and 330. Open only to television, film and new media majors in upper division standing.

Film and television genres (noir, western, comedy, musical, science fiction, soap opera, etc.) including key media texts, aesthetics, themes, history, and social context. May be repeated with new course content. See Class Schedule for specific content. Maximum credit six units.

## TFM 540. Documentary Production (3)

Two lectures and three or more hours of activity.
Prerequisites: Television, Film and New Media 314 and 361.
Hands-on field experiences in documentary production to include research and writing techniques, investigative procedures, interviewing, shooting and editing. Analyze significant documentaries.
TFM 550. Art Direction for Television and Film (3)
One lecture and four hours of activity.
Prerequisites: Television, Film and New Media 350; 361 or 362 for television, film and new media majors, and Theatre 440 for theatre majors, and consent of instructor. Proof of completion of prerequisites required: Copy of transcript.

Aesthetic, technical, and practical aspects of design for television and film. Experience in scenic design, graphics, set decoration, budgeting, and scheduling.
TFM 551. Production Design for Television and Film (3)
Prerequisites: Television, Film and New Media 350 and credit or concurrent registration in Television, Film and New Media 401.

Theory and analysis of production design concepts for television and film. Development of designs and analysis of technical requirements for fictional and nonfictional productions.
TFM 552. 3D Digital Storytelling (3)
Two lectures and three hours of activity.
Prerequisite: Television, Film and New Media Production 365.
Narrative in animation. Pre-production and production techniques in 3D animated film.

TFM 558. Costume Design for Television and Film (3)
Prerequisites: Theatre 452 and 530A or 530B.
Advanced studies in costume design. Budgeting and departmental management, character development, design problems, materials, production, rendering layout, script breakdowns.

## TFM 559. Digital Design for Film and Stage (3)

Prerequisite: Television, Film and New Media 350 or Theatre 440.

Theories and applications of commonly used 3D modeling programs in the entertainment industry. See Class Schedule for specific content. Maximum credit six units.

## TFM 560. Advanced Film (3)

Two lectures and more than three hours of activity.
Prerequisites: Television, Film and New Media 314 (or consent of instructor) and 362.

Practicum in direction and production of dramatic and nondramatic film. Cameras, lighting, design, sound techniques, experience in university sponsored productions. Completion of a short film.

## TFM 561. Advanced Television (3)

Two lectures and more than three hours of activity.
Prerequisite: Television, Film and New Media 314 (or consent of instructor).

Production processes and techniques to include producing, critical analysis, directing, digital cinematography, and editing of scripted projects. Experience in individual and university-sponsored productions.

## TFM 563. Documentary: History and Theory (3)

Prerequisites: Television, Film and New Media 160 for undergraduate students. Admission to the M.A. in television, film and new media for graduate students.

Persuasive concepts, techniques, and forms in documentary film. Major historical works and their impact on society. (Formerly numbered Television, Film and New Media 462.)

TFM 565. Advanced New Media (3)
Two lectures and three hours of activity.
Prerequisite: Television, Film and New Media Production 552.
Practicum in direction and development of immersive live action and 3D computer-generated passive or interactive productions.
TFM 571. Selected Topics in Director Studies (3)
Prerequisites: Television, Film and New Media 310 and 330. Open only to television, film and new media majors in upper division standing.

Historical significance of and theoretical approaches to major media directors (Welles, Hitchcock, Spielberg, etc.) including breadth of work, cultural and generic contexts, aesthetic innovation, and recurring themes. May be repeated with new content. See Class Schedule for specific topic. Maximum credit six units.
TFM 573. Selected Topics in History of Film, TV, and Media (3)
Prerequisites: Television, Film and New Media 310 and 330. Open only to television, film and new media majors in upper division standing.

Media history including cultural and generic developments, patterns of exhibition, technological influences, significant creative and industrial figures, commercial and social contexts. May be repeated with new content. See Class Schedule for specific topic. Maximum credit six units.

## TFM 590. Directing for Film and Television (3)

One lecture and six hours of activity.
Prerequisite: Television, Film and New Media 314 (or consent of instructor).

Directing fundamentals and production to include script analysis, director's preparation and directing actors.
TFM 596. Selected Topics in Television, Film and New Media (1-4)
Prerequisite: Twelve units in television, film and new media.
Specialized study of selected topics from the areas of television, film and new media. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit of six units of 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## GRADUATE COURSES

Refer to the Graduate Bulletin.

## Urban Studies

Refer to "Interdisciplinary Programs" in this section of the catalog.

# Women's Studies 

In the College of Arts and Letters

OFFICE: Arts and Letters 346
TELEPHONE: 619-594-6524
WEBSITE: http://womensstudies.sdsu.edu/
Faculty
Emeritus: Colwill, Espín, Huckle, Jones, Kohen, Scott, Watson, Zimmerman
Chair: Mattingly
Professors: Cayleff, Donadey, Ghosh, Jarmakani, Mattingly, Rothblum
Associate Professors: Hua, Lara, Price
Assistant Professors: Clune-Taylor, Whatcott

## Offered by the Department

Master of Arts degree in women's studies.
Major in women's studies with the B.A. degree
in liberal arts and sciences.
Minor in women's studies.
Certificate in women's studies, basic.
Certificate in women's studies, advanced
(refer to the Graduate Bulletin).

## The Major

The Department of Women's Studies offers students a course of study which explores traditional disciplines from the perspective of women, develops innovative multidisciplinary approaches, stimulates scholarly research in areas relevant to women, and provides an open forum for the exchange of ideas among students, faculty, and community. We embrace an approach that highlights intersections of oppressions and spans the scale from local to global. The department further seeks to bridge theory and action in working toward a society free from privilege based on age, class, gender and gender identity, nation, physical condition, race, or sexual orientation. SDSU has offered courses in women's studies since 1969 and has one of the strongest academic programs in the nation.

A degree in women's studies may be used as preparation for a wide range of careers. Professional opportunities exist in political and social agencies working with women and developing public policy on women's issues such as health care, employment, family violence, and education. Women's studies students prepare for careers in such fields as community organizing, education, journalism, law, personnel, psychology, public administration, and social services. The skills that women's studies majors develop in critical thinking and analysis are highly valued in many additional occupations and professions today. A women's studies major may also go on to advanced academic work preparing for a career as a women's studies scholar.

Many women's studies majors plan double majors to enhance their career opportunities.

## Impacted Program

The women's studies major is an impacted program. To be admitted to the women's studies major, students must meet the following criteria:
a. Complete preparation for the major;
b. Complete a minimum of 60 transferable semester units;
c. Have a minimum cumulative GPA of 2.0.

To complete the major, students must fulfill the degree requirements for the major described in the catalog in effect at the time they are accepted into the premajor at SDSU (assuming continuous enrollment).

## Major Academic Plans (MAPs)

Visit http://www.sdsu.edu/mymap for the recommended courses needed to fulfill your major requirements. The MAPs website was created to help students navigate the course requirements for their majors and to identify which General Education course will also fulfill a major preparation course requirement.

## Women's Studies Major

With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 49991) (SIMS Code: 119501)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in women's studies courses can apply to the degree.

Students majoring in women's studies must complete a minor in another field to be approved by the chair or major adviser of the department.
Preparation for the Major. Six units selected from Women's Studies 101, 102, and 103.

Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language to fulfill the graduation requirement. Refer to the section of this catalog on "Graduation Requirements."

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10 or completing one of the upper division writing courses (W) with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.
Internship/International Experience Requirement. All women's studies majors are required to complete either Women's Studies 598 or satisfy an international experience requirement. Women's Studies 598 can be completed any semester after prerequisites are met and approved by the internship director. To meet the international experience requirement, majors must complete one of the following with the approval and written consent of the undergraduate adviser:

1. International Field Trip;
2. International Internship;
3. International Student Exchange;
4. CSU Study Abroad Program.

Major. A minimum of 30 upper division units to include 12 units from Group I; 12 units from Group II; and Women's Studies 536 and 590.
Group I: Women's Studies 310, 320, 325, 331, 336, 340, 341A-341B, 352, 355, 360, 370, 375, 382; Africana Studies $332^{*}, 473^{*}$, Chicana and Chicano Studies 340A*, Lesbian, Gay, Bisexual, and Transgender Studies 321*, 322* [or Humanities 322*], Political Science 336*, Religious Studies 370*.
Group II: Women's Studies 512, 515, 520, 522, 530, 535, 545, $560,565,570,572,580,581,582,585,596,598 *$.

## *No more than three units may be applied to the major in women's studies.

## Women's Studies Minor <br> (SIMS Code: 119501)

The minor in women's studies consists of a minimum of 18 units in women's studies, of which 12 units must be upper division to include:

Six units selected from Women's Studies 101, 102, and 103, and six units selected from Women's Studies 310, 320, 325, 331, 336, 340, 341A-341B, 352, 355, 360, 370, 375, 382; Africana Studies 332*, 473*, Chicana and Chicano Studies 340A*, Lesbian, Gay, Bisexual, and Transgender Studies 321*, 322* [or Humanities $322^{*}$ ], Political Science 336*, Religious Studies 370*.

Six units selected from Women's Studies 512, 515, 520, 522, $530,535,536,545,560,565,570,572,580,581,582,585,590$, 596, 598*.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

[^20]
## Women's Studies Certificate

(Offered through SDSU Global Campus)
(SIMS Code: 119504)
The women's studies basic certificate is offered to non-degree seeking students to provide training in education, health care, community activism, social service agencies, and those concerned with issues relevant to women's lives. Completion of the certificate will increase understanding of women in the humanities, health, and social sciences, as well as become proficient in theories unique to the discipline. Students will learn how women lived, worked, thought, resisted, created knowledge, and engaged in cultural activism.

Students register in upper division Women's Studies courses through SDSU Global Campus. Before being admitted to the program, students must meet with an adviser to map out suitable courses. Applications may be obtained from SDSU Global Campus. Applications may be submitted prior to entering the program or before the completion of six semester units of coursework.

The certificate requires 12 units (four courses) to include Women's Studies 590 (fall) or 536 (spring) and three courses selected from the following overview areas:
Women's Studies Overview: Women's Studies 310, 336, 340, 341A-341B, 352, 370, 375, 512, 515, 530, 535, 560, 570, 580, 581.

Health Overview: Women's Studies 325, 360, 382, 520, 522, 565, 572, 582, 597*.
Any Health Overview course may be taken to fulfill Women's Studies Overview. Courses must be completed with a grade point average of 2.75 or better. No more than one 300 -level course may be taken for the certificate program.

For more information, visit the website at http://womensstudies. sdsu.edu/general_certificate.htm.
*With consent of program adviser.

## Courses (WMNST)

Refer to Courses and Curricula and University Policies sections of this catalog for explanation of the course numbering system, unit or credit hour, prerequisites, and related information.

## LOWER DIVISION COURSES

WMNST 101. Gender: Self, Identity, and Society (3) [GE]
Interdisciplinary introduction to women's studies thought and scholarship, to include topics such as body image, family structures, personality development and self-concept, relationships, reproduction, violence and health. Intersections of ability, class, gender and gender identity, race, sexual orientation.
WMNST 102. Women: Images and Ideas (3) [GE]
Major cultural representations of women in ancient through contemporary societies from perspectives in the humanities, including philosophy, religion, art, literature, and history.
WMNST 103. Women and Global Justice (3) [GE]
Gendered injustices and resistance from a global perspective. Colonization, environmental justice, gendered violence, migration, militarization, poverty, and travel and tourism. Structural inequalities in consumption, food production, and labor through a feminist lens. Activism and formation of social movements.
WMNST 296. Experimental Topics (1-4)
Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
WMNST 310. Global Cultures and Women's Lives (3) [GE]
Comparative study of social, economic, political, and ideological aspects of women's position in local and global contexts. Women's status as impacted by modern, indigenous, transitional, and/or border cultures.
WMNST 320. Socialization of Women (3) [GE]
Impact of formal and informal institutions on female development and roles across the life span.
WMNST 325. Psychology of Women (3) [GE]
Theories of the psychological development of women; investigation of biological and cultural factors influencing personality and behavior.
WMNST 331. Women in Asian Societies (3) [GE]
Socio-economic status of women in Asia. Feminism and the status of women in China, India, Japan, Korea, Philippines, and other countries. Feminist movements in Asia and women's status as affected by changing social, economic, and political orders in Asia.
WMNST 336. Women of Color in the United States (3) [GE]
Experiences of U.S. women of color through study of personal essay/autobiography, oral history, plays/novels, poetry, performance/visual art, theory, and other genres. Themes may include identity, voice, representation, empowerment, oppression, and social change.

## WMNST 340. History of Women and Sexuality in Modern

Europe (3) [GE]
Experiences, participation, and influence of European-descended women and women of color in Europe and in European colonies from the sixteenth to the twentieth century. Intersections of gender, race, class, sexuality, and power during the modern period.
WMNST 341A-341B. Women in American History (3-3) [GE-AI]
History of American social, cultural, economic, political, and intellectual institutions, focusing on the role and perspective of women. Semester I: From colonization to 1860; Semester II: From 1860 to the present. Satisfies the graduation requirement in American Institutions.
WMNST 352. Women in Literature (3) [GE]
Literature by and about women; appraisals of women's place in various literary genres; historical and contemporary themes; evolution of forms and techniques; relation to other art forms.
WMNST 355. Feminist Approaches to Popular Culture (3) [GE]
Gender and sexuality to include advertising, film, magazines, music, romance novels, social media, and television. How relations of power are transmitted through cultural forms. Ways popular culture shapes and is shaped by social and political contexts.
WMNST 360. Women's Sexuality and the Body (3) [GE]
Social, cultural, and political aspects of women's sexualities and bodies; relationships among beliefs and practices, and among sexual behaviors and identities in historical context; role of popular culture, scientific, medical, and religious ideas.
WMNST 370. Women, Law, and Policy (3) [GE]
Legal factors affecting women in employment, education, health and welfare, property ownership and criminal justice, including investigation of public policy issues which affect women's lives.
WMNST 375. Sex, Power, and Politics (3) [GE]
Social, economic and political factors which explain women's political status and participation. Topics include institutional structures, leadership and ideology, power and authority, and the women's movement as a political movement.
WMNST 382. Gender, Science, and Technology (3) [GE]
Feminist science studies to include women in science, scientific research on sex and gender differences, gender in relation to technology. Social and political impacts of science and technology and global contexts.

## WMNST 496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

## WMNST 499. Special Study (1-3)

Prerequisites: Three upper division units and consent of the department chair and instructor.

Individual study. Maximum credit six units.

## UPPER DIVISION COURSES

## (Also Acceptable for Advanced Degrees)

WMNST 512. Latinas in the Americas (3)
Prerequisite: Three upper division units in women's studies.
How social and other factors impact the lives of Latin American women. Theoretical frameworks illuminate their situation. Sociocultural perspectives are offered on Latin American women's life narratives.
WMNST 515. Women: Myth, Ritual, and the Sacred (3)
Prerequisite: Three upper division units in women's studies.
Meanings and functions of myths and rituals in their sacred and secular aspects, emphasizing their impact on women's lives and relationships in differing cultural contexts, past and present.
WMNST 520. Reproductive Rights and Justice (3)
Prerequisite: Three upper division units in women's studies.
History, cultural attitudes, and politics of reproduction and sexual health to include abortion, contraception, sterilization, sexually transmitted diseases (STDs), HIV/AIDS, sex education, reproductive, and genetic technology.

## WMNST 522. Women: Madness and Sanity (3)

Prerequisite: Three upper division units in women's studies.
Mental health and mental illness in literature, film, and psychological research. Clinical and feminist approaches to mental health issues in women's lives.
WMNST 530. Women's Movements and Activism (3)
Prerequisite: Three upper division units in women's studies.
Comparative study of women's movements worldwide, including organizations, issues and initiatives. Women's diverse social/political strategies within local, national, and global contexts. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

## WMNST 535. Lesbian Lives and Cultures (3)

Historical, cultural, and social exploration of lesbianism. Topics include myths and stereotypes, history and literature, social and political movements, theoretical explanations, and current conditions.
WMNST 536. Gender, Race, and Class (3)
Prerequisite: Three upper division units in women's studies.
Intersecting theories of gender, race and class in both local and global contexts. Major themes in history, culture, and contemporary lives of women analyzed through feminist and critical race theories.

## WMNST 545. Women and Sports (3)

Prerequisite: Three upper division units in women's studies.
Diverse women's creation of and involvement in recreational and competitive sports, mid-1800s to present to include impact of medical experts' views, homophobia, disability, individual elite athletes, team sports, economic viability, and changes since Title IX.
WMNST 560. Women in Muslim Societies (3)
Prerequisite: Three upper division units in women's studies.
Socio-political status of women in Muslim societies in Middle East, North Africa, and Asia; women in the Quran; Muslim women's movements.
WMNST 565. Women: Health, Healing, and Medicine (3)
Prerequisite: Three upper division units in women's studies.
Relationship of women to "modern" and "traditional" health care/healing systems in historical and cultural perspective. Representations and practices regarding the politics of women's health and illness.

## WMNST 570. Gender, War, and Peace (3)

Prerequisite: Three upper division units in women's studies.
Interdisciplinary exploration of women's relation to war, peace, and militarism; women's peace activism and beliefs about motherhood; women's roles in armed conflicts; effects of war on women; military policy and beliefs about masculinity.

## WMNST 572. Women and Violence (3)

Prerequisite: Three upper division units in women's studies.
Forms of violence against and by women. Processes which shape women's resistance to, and collusion in, social, economic, political, and sexual violence.

## WMNST 580. Women, Development, and the Global

Economy (3)
Prerequisite: Three upper division units in women's studies.
Women's roles as agents and recipients of global economic and political change focusing on women's empowerment, work, health, and the environment. Topics include women's movements worldwide and non-governmental organizations.
WMNST 581. Women's Experiences of Migration (3)
Prerequisite: Three upper division units in women's studies.
Gender analysis of impact of international migration on women's lives. Identity formation, trauma, language, gender roles, and sexuality in life narratives of immigrant and refugee women. Economic and legal issues affecting immigrant and refugee women.

## WMNST 582. Feminist Science and Activism (3)

Prerequisite: Three upper division units in women's studies.
Feminist science studies to examine role of public in creating and challenging scientific knowledge. Case studies of activism and science. May include HIV/AIDS, the environment, sex differences, women's health, and technology.
WMNST 585. Local Feminist Activism and Organizations (3)
Prerequisite: Three upper division units in women's studies.
Links scholarly knowledge about feminist activism and nonprofit organizations serving women to specific information about San Diego area. Entering workforce preparation and activism to include economic justice, LGBTQ issues, reproductive rights and justice, sexual violence.

## WMNST 590. Feminist Thought (3)

Prerequisites: Six upper division units in women's studies.
Readings of feminist theory in historical perspective, with attention to contemporary debates in feminist scholarship.

## WMNST 596. Topics in Women's Studies (1-3)

Prerequisite: Consent of instructor.
Advanced topics in women's studies. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of $296,496,596$ courses applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approval of the graduate adviser.

## WMNST 597. Research Project (3)

Prerequisites: Six upper division units in women's studies and consent of adviser.

Individual research project.
WMNST 598. Women's Studies Internship (3) $\mathrm{Cr} / \mathrm{NC}$
Prerequisites: Three upper division units in women's studies and consent of instructor.

Application of women's studies theories and scholarship to community service and activism. Internship includes 120 hours of work in local public and private agencies serving women and girls. Maximum credit six units.

GRADUATE COURSES
Refer to the Graduate Bulletin.


in this section:
» University Policies

# University Policies 

## Student Responsibility for Catalog Information

Students are held individually responsible for the information contained in this catalog. The requirements listed in the Graduation Requirements section of the catalog are those requirements which the university will make every effort to preserve for students subject to this catalog. All other parts of the catalog, including this University Policies section, are subject to change from year to year as university rules, policies, and curricula change. Failure to keep informed of such changes will not exempt students from whatever penalties they may incur.

## Changes of Rules and Policies

Although every effort has been made to assure the accuracy of the information in this catalog, students and others who use this catalog should note that laws, rules, and policies change from time to time and that these changes may alter the information contained in this publication. Changes may come in the form of statutes enacted by the legislature, rules and policies adopted by the Board of Trustees of the California State University, by the chancellor or designee of the California State University, or by the president or designee of San Diego State University. It is not possible in a publication of this size to include all of the rules, policies, and other information that pertain to students, San Diego State University, and the California State University. More current or complete information may be obtained from the appropriate department, school, or administrative office. Each semester, the Class Schedule outlines changes in academic policy and procedure and current deadlines which are of importance to students.

Nothing in this publication shall be construed as, operate as, or have the effect of an abridgment or a limitation of any rights, powers, or privileges of the Board of Trustees of the California State University, the chancellor of the California State University, or the president of San Diego State University. The trustees, the chancellor, and the president are authorized by law to adopt, amend, or repeal rules and policies that apply to students. This catalog does not constitute a contract or the terms and conditions of a contract between the student and San Diego State University or the California State University. The relationship of students to San Diego State University and the California State University is one governed by statute, rules, and policy adopted by the legislature, the trustees, the chancellor, the presidents and their duly authorized designees.

## Privacy Rights of Students in Education Records

The federal Family Educational Rights and Privacy Act of 1974 (20 U.S.C. 1232g) (FERPA) and regulations adopted thereunder (34 C.F.R. 99) set out requirements designed to protect students' privacy in their educational records maintained by the campus. The statute and regulations govern access to certain student records maintained by the campus and the release of such records. FERPA provides that the campus must give students access to most records directly related to the student, and must also provide opportunity for a hearing to challenge the records if the student claims they are inaccurate, misleading, or otherwise inappropriate. The right to a hearing under this law does not include any right to challenge the appropriateness of a grade determined by the instructor. FERPA generally requires the campus obtain a student's written consent before releasing personally identifiable data to the student. The campus has adopted a set of policies and procedures governing implementation of FERPA and the regulations. Copies of these policies and procedures may be obtained through the SDSU Office of the Registrar website at http://arweb. sdsu.edu/es/registrar/privacy.html.

Among the information included in the campus statement of policies and procedures are: (1) the student records maintained and the information they contain; (2) the campus official responsible for maintaining each record; (3) the location of access lists indicating persons requesting or receiving information from the
record; (4) policies for reviewing and expunging records; (5) student access rights to their records; (6) procedure for challenging the content of student records; and (7) the student's right to file a complaint with the Department of Education. The Department of Education has established an office and review board to investigate complaints and adjudicate violations. The designated office is: Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue, SW, Washington, D.C. 20202-5920.

FERPA authorizes the campus to release "directory information" pertaining to students. "Directory information" may include the student's name, address, telephone listing, electronic mail address, photograph, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, grade level, enrollment status, degrees, honors, and awards received, and the most recent previous educational agency or institution the student attended. The campus may release this "directory information" at any time unless the campus has received prior written objection from the student specifying the information the student requests not be released. Students are given an opportunity to restrict the release of "directory information" about themselves by accessing http://www.sdsu.edu/portal.

The campus is authorized to provide access to student records to campus officials and employees who have legitimate educational interests in such access. These persons have responsibilities in the campus' academic, administrative or service functions and have reason for accessing student records associated with their campus or other related academic responsibilities. Student records will be disclosed to the CSU Chancellor's Office in order to conduct research, to analyze trends, or to provide other administrative services. Student records may also be disclosed to other persons or organizations under such conditions (e.g., as part of the accreditation or program evaluation; in response to a court order or subpoena; in connection with financial aid; or to other institutions to which the student is transferring).

## Nondiscrimination Policy and Complaint Procedures

The Center for Student Rights and Responsibilities, 619-5943069, and the Office of Employee Relations and Compliance, 619-594-6464, have been designated to coordinate the efforts of SDSU to comply with all applicable federal and state laws prohibiting discrimination on these bases. CSU Executive Order 1097, revised March 29, 2019, (https://calstate.policystat.com/ policy/6742449/latest/) (or any successor executive order) is the systemwide procedure for all complaints of discrimination, harassment or retaliation made by students against the CSU, a CSU employee, other CSU students or a third party.

## Protected Status: Genetic Information, Marital Status, Medical Condition, Nationality, Race or Ethnicity (including color or ancestry), Religion or Religious Creed, and Veteran or Military Status

California State University does not discriminate on the basis of age, genetic information, marital status, medical condition, nationality, race or ethnicity (including color and ancestry), religion (or religious creed), and veteran or military status - as these terms are defined in CSU Executive Order 1097 - in its programs and activities, including admission and access. Federal and state laws, including Title VI of the Civil Rights Act of 1964 and the California Equity in Higher Education Act, prohibit such discrimination.

## Protected Status: Disability

California State University does not discriminate on the basis of disability (physical and mental) - as this term is defined in CSU Executive Order 1097 - in its programs and activities, including admission and access. Federal and state laws, including sections 504 and 508 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, prohibit such discrimination. Students should address inquiries concerning San Diego State University's compliance with all relevant disability laws to the director
of the Student Ability Success Center, Calpulli Center, Room 3101, San Diego State University, CA 92182, or call 619-594-6473 (TDD: 619-594-2929).

## Genetic Information

The Genetic Information Nondiscrimination Act of 2008 (GINA) prohibits employers and other entities covered by GINA Title II from requesting or requiring genetic information of an individual or family member of the individual, except as specifically allowed by this law. "Genetic information" as defined by GINA, includes an individual's family medical history, the results of an individual's or family member's genetic tests, the fact that an individual or an individual's family member sought or received genetic services, and genetic information of a fetus carried by an individual or an individual's family member or an embryo lawfully held by an individual or family member receiving assistive reproductive services.

## Protected Status: Gender (or sex), Gender Identity (including transgender), Gender Expression and Sexual Orientation

California State University does not discriminate on the basis of gender (or sex), gender (including transgender) identity, gender expression, or sexual orientation - as these terms are defined in CSU policy - in its programs and activities, including admission and access. Federal and state laws, including Title IX of the Education Amendments of 1972, prohibit such discrimination. The California State University is committed to providing equal opportunities to all CSU students in all campus programs, including intercollegiate athletics.

Title IX of the Education Amendments of 1972 protects all people regardless of their gender, gender identity, gender expression or sexual orientation from gender discrimination, which includes sexual harassment and violence:

- Sex Discrimination or Gender Discrimination means an adverse action taken against a student by the CSU, a CSU employee, or another student because of gender or sex (including sexual harassment, sexual misconduct, domestic violence, dating violence, and stalking) that is perpetrated against an individual on a basis prohibited by Title IX of the Education Amendments of 1972, 20 U.S.C. §1681 et seq., and its implementing regulations, 34 C.F.R. Part 106 (Title IX); California Education Code $\S 66250$ et seq., and/or California Government Code §11135.
- Sexual Harassment, a form of sex discrimination, is unwelcome verbal, nonverbal, or physical conduct of a sexual nature that includes, but is not limited to, sexual advances, requests for sexual favors, and any other conduct of a sexual nature where:

1. Submission to, or rejection of, the conduct is explicitly or implicitly used as the basis for any decision affecting a complainant's academic status or progress, or access to benefits and services, honors, programs, or activities available at or through the university; or
2. The conduct is sufficiently severe, persistent or pervasive that its effect, whether or not intended, could be considered by a reasonable person in the shoes of the complainant, and is in fact considered by the complainant, as limiting his or her ability to participate in or benefit from the services, activities or opportunities offered by the university; or
3. The conduct is sufficiently severe, persistent or pervasive that its effect, whether or not intended, could be considered by a reasonable person in the shoes of the complainant, and is in fact considered by the complainant, as creating an intimidating, hostile or offensive environment.
Sexual harassment could include being forced to engage in unwanted sexual contact as a condition of membership in a student organization; being subjected to video exploitation or a campaign of sexually explicit graffiti; or frequently being exposed to unwanted images of a sexual nature in a classroom that are unrelated to the coursework.

Sexual harassment also includes acts of verbal, non-verbal or physical aggression, intimidation or hostility based on gender or sex-stereotyping, even if those acts do not involve conduct of a sexual nature.

CSU Executive Order 1097 covers unwelcome conduct of a sexual nature. While romantic, sexual, intimate, personal or social
relationships between members of the university community may begin as consensual, they may evolve into situations that lead to sexual harassment or sexual misconduct, including dating or domestic violence, or stalking, subject to this policy. Claiming that the conduct was not motivated by sexual desire is not a defense to a complaint of harassment based on gender.

- Sexual Misconduct: All sexual activity between members of the university community must be based on affirmative consent. Engaging in any sexual activity without first obtaining affirmative consent to the specific activity is sexual misconduct, whether or not the conduct violates any civil or criminal law. Sexual activity includes, but is not limited to, kissing, touching intimate body parts, fondling, intercourse, penetration of any body part, and oral sex. It also includes any unwelcome physical acts, such as unwelcome sexual touching, sexual assault, sexual battery, rape, and dating violence. When based on gender, domestic violence or stalking also constitute sexual misconduct. Sexual misconduct may include using physical force, violence, threat or intimidation, ignoring the objections of the other person, causing the other person's intoxication or incapacitation through the use of drugs or alcohol, or taking advantage of the other person's incapacitation (including voluntary intoxication) to engage in sexual activity. Men as well as women can be victims of these forms of sexual misconduct. Sexual activity with a minor is never consensual when the complainant is under 18 years old, because the minor is considered incapable of giving legal consent due to age.
- Sexual Assault is a form of sexual misconduct and is an attempt, coupled with the ability, to commit a violent injury on the person of another because of that person's gender or sex.
- Sexual Battery is a form of sexual misconduct and is any willful and unlawful use of force or violence upon the person of another because of that person's gender or sex as well as touching an intimate part of another person against that person's will and for the purpose of sexual arousal, gratification, or abuse.
- Rape is a form of sexual misconduct and is non-consensual sexual intercourse that may also involve the use of threat of force, violence, or immediate and unlawful bodily injury or threats of future retaliation and duress. Any sexual penetration, however slight, is sufficient to constitute rape. Sexual acts including intercourse are considered non-consensual when a person is incapable of giving consent because they are incapacitated from alcohol and/or drugs, is under 18 years old, or if a mental disorder or developmental or physical disability renders the person incapable of giving consent. The respondent's relationship to the person (such as family member, spouse, friend, acquaintance, or stranger) is irrelevant. (See complete definition of consent below.)
- Acquaintance Rape is a form of sexual misconduct committed by an individual known to the victim. This includes a person the victim may have just met; i.e., at a party, introduced through a friend, or on a social networking website. (See above for definition of rape.)
- Affirmative Consent means an informed, affirmative, conscious, voluntary, and mutual agreement to engage in sexual activity. It is the responsibility of each person involved in the sexual activity to ensure that they have the affirmative consent of the other participant(s) to engage in the sexual activity. Lack of protest or resistance does not mean consent nor does silence mean consent. Affirmative consent must be voluntary, and given without coercion, force, threats, or intimidation.
» The existence of a dating or social relationship between those involved, or the fact of past sexual activities between them, should never by itself be assumed to be an indicator of affirmative consent. A request for someone to use a condom or birth control does not, in and of itself, constitute affirmative consent.
» Affirmative consent can be withdrawn or revoked. Consent to one form of sexual activity (or sexual act) does not constitute consent to other forms of sexual activity. Consent given to sexual activity on one occasion does not constitute consent on another occasion. There must always be mutual and affirmative consent to engage in sexual activity.

Consent must be ongoing throughout a sexual activity and can be revoked at any time, including after penetration. Once consent is withdrawn or revoked, the sexual activity must stop immediately.
» A person who is incapacitated cannot give affirmative consent. A person is unable to consent when they are asleep, unconscious, or is incapacitated due to the influence of drugs, alcohol, or medication so that they could not understand the fact, nature, or extent of the sexual activity. A person is incapacitated if they lack the physical and/or mental ability to make informed, rational decisions.
» Whether an intoxicated person (as a result of using alcohol or other drugs) is incapacitated depends on the extent to which the alcohol or other drugs impact the person's deci-sion-making capacity, awareness of consequences, and ability to make fully informed judgments. A person's own intoxication or incapacitation from drugs or alcohol does not diminish that person's responsibility to obtain affirmative consent before engaging in sexual activity.
» A person with a medical or mental disability may also lack the capacity to give consent.
»Sexual activity with a minor (a person under 18 years old) is not consensual, because a minor is considered incapable of giving legal consent due to age.
» It shall not be a valid excuse that a person affirmatively consented to the sexual activity if the respondent knew or reasonably should have known that the person was unable to consent to the sexual activity under any of the following circumstances:
, The person was asleep or unconscious;
) The person was incapacitated due to the influence of drugs, alcohol, or medication, so that the person could not understand the fact, nature, or extent of the sexual activity;
> The person was unable to communicate due to a mental or physical condition.
» It shall not be a valid excuse that the respondent believed that the person consented to the sexual activity under either of the following circumstances:
> The respondent's belief in affirmative consent arose from the intoxication or recklessness of the respondent;
> The respondent did not take reasonable steps, in the circumstances known to the respondent at the time, to ascertain whether the person affirmatively consented.

- Consensual Relationship means a sexual or romantic relationship between two persons who voluntarily enter into such a relationship. While sexual and/or romantic relationships between members of the university community may begin as consensual, they may evolve into situations that lead to discrimination, harassment, retaliation, sexual misconduct, dating, or domestic violence, or stalking.
»A university employee shall not enter into a consensual relationship with a student or employee over whom they exercise direct or otherwise significant academic, administrative, supervisory, evaluative, counseling, or extracurricular authority. In the event such a relationship already exists, each campus shall develop a procedure to reassign such authority to avoid violations of this policy.
» This prohibition does not limit the right of an employee to make a recommendation on the personnel matters concerning a family or household member where the right to make recommendations on such personnel matters is explicitly provided for in the applicable collective bargaining agreement or MPP/confidential personnel plan.
- Domestic Violence is abuse committed against someone who is a current or former spouse, current or former cohabitant, someone with whom the respondent has a child, someone with whom the respondent has or had a dating or engagement relationship, or a person similarly situated under California domestic or family violence law. Cohabitant means two unrelated persons living together for a substantial period of time, resulting in some permanency of relationship. It does not include roommates who do not have a romantic, intimate, or sexual relationship. Factors that may determine whether
persons are cohabiting include, but are not limited to (1) sexual relations between the parties while sharing the same living quarters, (2) sharing of income or expenses, (3) joint use or ownership of property, (4) whether the parties hold themselves out as spouses, (5) the continuity of the relationship, and (6) the length of the relationship. For purposes of this definition, "abuse" means intentionally or recklessly causing or attempting to cause bodily injury or placing another person in reasonable apprehension of imminent serious bodily injury to himself or herself, or another. Abuse does not include non-physical, emotional distress, or injury.
- Dating Violence is abuse committed by a person who is or has been in a social or dating relationship of a romantic or intimate nature with the victim. This may include someone the victim just met; i.e., at a party, introduced through a friend, or on a social networking website. For purposes of this definition, "abuse" means intentionally or recklessly causing or attempting to cause bodily injury or placing another person in reasonable apprehension of imminent serious bodily injury to himself or herself, or another. Abuse does not include non-physical, emotional distress or injury.
- Stalking means engaging in a repeated course of conduct directed at a specific person that would cause a reasonable person to fear for their or others' safety, or to suffer substantial emotional distress. For purposes of this definition:
» Course of conduct means two or more acts, including but not limited to, acts in which the stalker directly, indirectly, or through third parties, by any action, method, device, or means, follows, monitors, observes, surveils, threatens, or communicates to or about a person, or interferes with a person's property;
» Reasonable person means a reasonable person under similar circumstances and with the same protected status(es) as the complainant;
" Substantial emotional distress means significant mental suffering or anguish that may, but does not necessarily, require medical or other professional treatment or counseling.
- See further information in San Diego State University's sexual violence prevention and education statement, Title IX Notice of Nondiscrimination (which includes facts and myths about sexual violence), and Victim's Rights and Options Notice, at http://oerc.sdsu.edu/Title_IX_Notice.html.


## Whom to Contact If You Have Complaints, Questions, or Concerns

Title IX requires the university to designate a Title IX coordinator to monitor and oversee Title IX compliance. The campus Title IX coordinator is available to explain and discuss the university's complaint process, including the investigation and hearing process; the availability of reasonable supportive measures (both on and off campus regardless of whether the person chooses to report the conduct); the right to file a criminal complaint (for example, in cases of sexual misconduct); how confidentiality is handled; other related matters. If you are in the midst of an emergency, call the police immediately by dialing 9-1-1.

## SDSU Title IX Coordinator

Jessica Rentto, jrentto@sdsu.edu
Administration, Room 320
619-594-6017

## SDSU Deputy Title IX Coordinator

Dr. Lee Mintz, Imintz@sdsu.edu
Student Services West, Room 1604
619-594-3069
SDSU Police Department
police@sdsu.edu
5350 55th Street
619-594-1991
U.S. Department of Education, Office for Civil Rights (OCR)

800-421-3481 (main office), or 415-486-5555 (California office), or 800-877-8339 (TDD) or http://ocr@ed.gov (main office), or http://ocr.sanfrancisco@ed.gov (California office)
If you wish to fill out a complaint form online with the OCR, go to : http://www2.ed.gov/about/offices/list/ocr/complaintintro.html.

Title IX requires the university to adopt and publish complaint procedures that provide for prompt and equitable resolution of gender discrimination complaints, including sexual harassment,
and misconduct, as well as provide training, education, and preventive measures related to sex discrimination. CSU Executive Order 1097 (http://www.calstate.edu/EO/EO-1097-rev-10-5-16. pdf) (or any successor policy) is the systemwide procedure for all complaints of discrimination, harassment, or retaliation made by students against the CSU, a CSU employee, other CSU students, or a third party.

Duty to Report. Except as provided below under confidentiality and sexual misconduct, dating violence, domestic violence, and stalking, any university employee who knows or has reason to know of allegations or acts that violate university policy shall promptly inform the Title IX Coordinator. These employees are required to disclose all information including the names of the parties, even where the person has requested that their name remain confidential. The Title IX Coordinator will determine whether confidentiality is appropriate given the circumstances of each such incident (see confidential reporting options outlined below).

Regardless of whether an alleged victim of gender discrimination ultimately files a complaint, if the campus knows or has reason to know about possible sexual discrimination, harassment, or misconduct, it must review the matter to determine if an investigation is warranted. The campus must then take appropriate steps to eliminate any gender discrimination/harassment/misconduct, prevent its recurrence, and remedy its effects.

## Safety of the Campus Community is Primary

The university's primary concern is the safety of its campus community members. The use of alcohol or drugs never makes the victim at fault for gender discrimination, harassment, or misconduct; therefore, victims should not be deterred from reporting incidents of sexual misconduct out of a concern that they might be disciplined for related violations of drug, alcohol, or other university policies. Except in extreme circumstances, victims of sexual misconduct shall not be subject to discipline for related violations of the Student Conduct Code.

## Information Regarding Campus, Criminal, and Civil Consequences of Committing Acts of Sexual Violence

Individuals alleged to have committed sexual misconduct may face criminal prosecution by law enforcement and may incur penalties as a result of civil litigation. In addition, students may face discipline at the university, up to and including suspension or expulsion and withholding of their degrees. Employees may face sanctions up to and including suspension, demotion, or dismissal from employment, pursuant to established CSU policies and provisions of applicable collective bargaining unit agreements.

Students who are charged by the university with gender discrimination, harassment, or misconduct will be subject to discipline, pursuant to the California State University Student Conduct Procedures (CSU Executive Order 1098 at https://calstate.policystat.com/policy/6742449/latest/ or any successor executive order) and will be subject to appropriate sanctions. In addition, during any investigation, the university may implement interim measures in order to maintain a safe and non-discriminatory educational environment. Such measures may include, but not be limited to: immediate interim suspension from the university; a required move from university-owned or affiliated housing; adjustments to course schedule; and/or prohibition from contact with parties involved in the alleged incident.

## Confidentiality and Sexual Misconduct, Dating Violence, Domestic Violence, and Stalking

The university encourages victims of sexual misconduct, dating violence, domestic violence, or stalking to talk to someone about what happened - so they can get the support they need, and so the university can respond appropriately.

## Privileged and Confidential Communications

Physicians, psychotherapists, professional, licensed counselors, licensed clinical social workers, and clergy who work or volunteer on or off campus, acting solely in those roles or capacities as part of their employment, and who provide medical or mental health treatment or counseling (and those who act under their supervision, including all individuals who work or volunteer in their centers and offices) may not report any information about an incident of sexual misconduct to anyone else at the university, including the Title IX coordinator, without the victim's consent. A victim
can seek assistance and support from physicians, psychotherapists, professional, licensed counselors, licensed clinical social workers, and clergy without triggering a university investigation that could reveal the victim's identity or the fact of the victim's disclosure. However, see limited exceptions below regarding when health care practitioners must report to local law enforcement agencies. Health care practitioners should explain these limited exceptions to victims, if applicable.

Sexual assault and domestic violence counselors and advocates who work or volunteer on or off campus in sexual assault centers, victim advocacy offices, women's centers, and health centers and who are acting solely in that role (including those who act in that role under their supervision, along with non-professional counselors or advocates who work or volunteer in sexual assault centers, victim advocacy offices, women's centers, gender equity centers, or health centers) may talk to a victim without revealing any information about the victim and the incident of sexual misconduct to anyone else at the university, including the Title IX Coordinator, without the victim's consent. A victim can seek assistance and support from these counselors and advocates without triggering a university investigation that could reveal his/her identity or that a victim disclosed an incident to them. However, see limited exceptions below regarding when sexual assault and domestic violence counselors and advocates must report to local law enforcement agencies. Counselors and advocates should explain these limited exceptions to victims, if applicable.
The university will be unable to conduct an investigation into a particular incident or pursue disciplinary action against a perpetrator if a victim chooses to (1) speak only to a physician, professional licensed counselor, licensed clinical social worker, clergy member, sexual assault counselor, domestic violence counselor, or advocate; and (2) maintain complete confidentiality. Even so, these individuals will assist victims in receiving other necessary protection and support, such as victim advocacy, disability, services, medical/health or mental health services, or legal services, and will advise victims regarding their right to file a Title IX complaint with the university and a separate complaint with local or university police. If a victim insists on confidentiality, such professionals, counselors and advocates will likely not be able to assist the victim with: university academic support or accommodations; changes to university-based living or working schedules; or adjustments to course schedules. A victim who at first requests confidentiality may later decide to file a complaint with the university or report the incident to the police, and thus have the incident fully investigated. These counselors and advocates can provide victims with that assistance if requested by the victim. These counselors and advocates will also explain that Title IX includes protections against retaliation, and that the university will not only take steps to prevent retaliation when it knows or reasonably should know of possible retaliation, but will also take strong responsive action if retaliation occurs.

EXCEPTIONS: Under California law, any health practitioner employed in a health facility, clinic, physician's office, or local or state public health department or clinic is required to make a report to local law enforcement if he or she provides medical services for a physical condition to a patient/victim who he or she knows or reasonably suspects is suffering from (1) a wound or physical injury inflicted by a firearm; or (2) any wound or other physical injury inflicted upon a victim where the injury is the result of assaultive or abusive conduct (including sexual misconduct, domestic violence, and dating violence). This exception does not apply to sexual assault and domestic violence counselors and advocates. Health care practitioners should explain this limited exception to victims, if applicable.

Additionally, under California law, all professionals described above (physicians, psychotherapists, professional counselors, licensed clinical social workers, clergy, and sexual assault and domestic violence counselors and advocates) are mandatory child abuse and neglect reporters, and are required to report incidents involving victims under 18 years of age to local law enforcement. These professionals will explain this limited exception to victims, if applicable.

Finally, some or all of these professionals may also have reporting obligations under California law to: (1) local law enforcement in cases involving threats of immediate or imminent harm to self or
others where disclosure of the information is necessary to prevent the threatened danger; or (2) to the court if compelled by court order or subpoena in a criminal proceeding related to the sexual misconduct, dating or domestic violence or stalking incident. If applicable, these professionals will explain this limited exception to victims.

## Reporting to University or Local Police

If a victim reports to local or university police about sexual misconduct, crimes, the police are required to notify victims that their names will become a matter of public record unless confidentiality is requested. If a victim requests that their identity be kept confidential, their name will not become a matter of public record and the police will not report the victim's identity to anyone else at the university, including the Title IX coordinator. University police will, however, report the facts of the incident itself to the Title IX coordinator being sure not to reveal to the Title IX coordinator victim names/identities or compromise their own criminal investigation. The university is required by the federal Clery Act to report certain types of crimes (including certain sex offenses) in statistical reports. However, while the university will report the type of incident in the annual crime statistics report known as the Annual Security Report, victim names/identities will not be revealed.

## Reporting to the Title IX Coordinator and Other University Employees

Most university employees have a duty to report incidents of sexual misconduct when they are on notice of it. When a victim tells the Title IX coordinator or another university employee about an incident of sexual misconduct, the victim has the right to expect the university to take immediate and appropriate steps to investigate what happened and to resolve the matter promptly and equitably. In all cases, the university strongly encourages victims to report incidents of sexual misconduct directly to the campus Title IX coordinator. As detailed above, in the "Privileged and Confidential Communications" section of this policy, all university employees except physicians, licensed professional counselors, licensed clinical social workers, sexual assault counselors and advocates, must report to the Title IX coordinator all relevant details about any incidents of sexual misconduct of which they become aware. The university will need to determine what happened - and will need to know the names of the victim(s) and the perpetrator(s), any witnesses, and any other relevant facts, including the date, time, and specific location of the incident.

To the extent possible, information reported to the Title IX coordinator or other university employees will be shared only with individuals responsible for handling the university's response to the incident. The university will protect the privacy of individuals involved in a sexual misconduct violence incident except as otherwise required by law or university policy. A report of sexual misconduct may result in the gathering of extremely sensitive information about individuals in the campus community. While such information is considered confidential, university policy regarding access to public records and disclosure of personal information may require disclosure of certain information concerning a report of sexual misconduct. In such cases, efforts will be made to redact the records, as appropriate, in order to protect the victim's identity and privacy and the privacy of other involved individuals. Except as detailed in the section on "Privileged and Confidential Communications" above, no university employee, including the Title IX coordinator, should disclose the victim's identity to the police without the victim's consent or unless the victim has also reported the incident to the police.

If a victim requests of the Title IX coordinator or another university employee that their identity remain completely confidential, the Title IX coordinator will explain that the university cannot always honor that request or guarantee complete confidentiality. If a victim wishes to remain confidential or request that no investigation be conducted or disciplinary action taken, the university must weigh that request against the university's obligation to provide a safe, non-discriminatory environment for all students, employees, and third parties, including the victim. Under those circumstances, the Title IX coordinator will determine whether the victim's request for complete confidentiality and/or no investigation can be honored under the facts and circumstances of the particular case, including whether the university has a legal obligation to report the incident, conduct an investigation or take
other appropriate steps. Without information about a victim's identity, the university's ability to meaningfully investigate the incident and pursue disciplinary action against the perpetrator may be severely limited. See CSU Executive Order 1095 (or any successor executive order) for further details around confidential reporting, and other related matters (http://www.calstate.edu/eo/ EO-1095-rev-6-23-15.pdf).

## Additional Resources

SDSU's sexual misconduct prevention and education statement,
which includes facts and myths about sexual misconduct, at
http://oerc.sdsu.edu/Title_IX_Notice.htmI.
U.S. Department of Education, regional office:

Office for Civil Rights
50 United Nations Plaza
San Francisco, CA 94102
415-486-5555 (TDD 877-521-2172)
U.S. Department of Education, national office:

Office for Civil Rights
800-872-5327
California Coalition Against Sexual Assault
1215 K. Street, Suite 1850
Sacramento, CA 95814
916-446-2520
http://calcasa.org/
Know Your Rights about Title IX:
http://www2.ed.gov/about/offices/list/ocr/docs/title-ix-rights-201104. html

## Domestic and Family Violence:

Office of Justice Programs, United States Department of Justice https://ovc.ncjrs.gov/topic.aspx?topicid=27
National Institute of Justice:
Intimate Partner Violence
Office of Justice Programs, United States Department of Justice http://www.nij.gov/topics/crime/intimate-partner-violence/Pages/ welcome.aspx

National Domestic Violence Hotline:
1-800-799-SAFE (7233)
http://www.thehotline.org/
Office of Violence against Women:
United States Department of Justice http://www.justice.gov/ovw
Centers for Disease Control and Prevention:
Intimate Partner Violence
http://www.cdc.gov/ViolencePrevention/intimatepartnerviolence/ index.html

Defending Childhood, United States Department of Justice: http://www.justice.gov/archives/defendingchildhood/

## Center for Community Solutions:

4508 Mission Bay Drive
San Diego, CA 92109
1-888-DVLINKS (385-4657) 24-Hour Toll Free Crisisline http://www.CCssd.org

## Licensure And Credentialing

Admission into programs leading to licensure and credentialing does not guarantee that students will obtain a license or credential. Licensure and credentialing requirements are set by agencies that are not controlled by or affiliated with the CSU and requirements can change at any time. For example, licensure or credentialing requirements can include evidence of the right to work in the United States (e.g., social security number or tax payer identification number) or successfully passing a criminal background check. Students are responsible for determining whether they can meet licensure or credentialing requirements. The CSU will not refund tuition, fees, or any associated costs, to students who determine subsequent to admission that they cannot meet licensure or credentialing requirements.

## Numbering of Courses

Courses numbered 80 through 99 are nonbaccalaureate level and are not acceptable for a bachelor's degree; those numbered 100 through 299 are in the lower division (freshman and sophomore years); those numbered 300 through 499 are in the upper division (junior and senior years) and intended for
undergraduates; those numbered 500 through 599 are in the upper division and are also acceptable for advanced degrees when taken by students admitted to graduate standing; those numbered 600 through 799 are graduate courses; and those numbered 800 through 899 are doctoral courses.

Courses numbered at the 900 level, except 997, are reserved for graduate courses in certain professional curricula as part of advanced certificate, credential, and licensure programs and are specifically intended for students admitted to the university with post-baccalaureate classified standing. Undergraduate students may enroll in these courses only if they are officially admitted to a blended or integrated program where undergraduate and credential coursework is included in the same program. Courses numbered at the 900 level are not applicable to other graduate programs, except for the Master of Arts in Teaching degree program.

Courses numbered 397 offered in regular sessions are professional advancement training or tutorial/discussion classes that accompany other credit courses and are not acceptable towards an undergraduate or graduate degree.

Courses numbered X -01 through $\mathrm{X}-79$ and $\mathrm{X}-397$ are Extension professional development units offered only through Extension to meet specific academic needs of community groups and are not acceptable toward an undergraduate or graduate degree.

## Undergraduate Enrollment in 600-, 700-, and 800-Numbered Courses

1. Undergraduate students must obtain permission of the instructor or department/school, if applicable, prior to registering in any 600-, 700-, and 800-numbered courses.
2. If an undergraduate student takes a 600-level or higher course without appropriate paperwork on file with the university (e.g., no concurrent master's degree in process), the class will automatically become part of the student's undergraduate academic record. A "G" reference code (undergraduate credit only) will be inserted next to the course on the student's SDSU transcript. If the undergraduate student would like the 600level or higher course to be part of their major or minor requirements, the student's academic adviser must submit a Request for Adjustment of Academic Requirement (RAAR) to the Office of Advising and Evaluations specifying which major or minor requirement the 600-level course will satisfy.
NOTE: Coursework completed prior to earning a baccalaureate degree is not applicable toward any future graduate degree except under policy for concurrent master's degree credit.

## Grading System

## Definition of Grades for Undergraduate Students

Grades and grade points per unit used in reporting are as follows: Grade of A (outstanding achievement; available only for the highest accomplishment), 4 points; $\mathbf{B}$ (praiseworthy performance; definitely above average), 3 points; $\mathbf{C}$ (average; awarded for satisfactory performance; the most common undergraduate grade), 2 points; $\mathbf{D}$ (minimally passing; less than the typical undergraduate achievement), 1 point; $\mathbf{F}$ (failing), 0 points; RP (report in progress), not counted in the grade point average; $\mathbf{W}$ (withdrawal), not counted in the grade point average; AU (audit), no credit earned and not counted in the grade point average; $\mathbf{C r}$ (credit), signifying units earned, but not counted in the grade point average; NC (no credit), no credit earned and not counted in the grade point average; I (incomplete authorized), no credit earned and not counted in the grade point average until one calendar year has expired at which time it will be changed to an IC (incomplete charged) and will count as an $F$ for grade point average computation; WU (withdrawal unauthorized), will count as an F for grade point average computation.

## Definition of Grades for Graduate Students

Grades and grade points per unit used in reporting are as follows: Grade of $\mathbf{A}$ (outstanding achievement; available for the highest accomplishment), 4 points; B (average; awarded for satisfactory performance), 3 points; $\mathbf{C}$ (minimally passing), 2 points; D (unacceptable for graduate credit; course must be repeated), 1 point; $\mathbf{F}$ (failing), 0 points; RP (report in progress), not counted in the grade point average; $\mathbf{W}$ (withdrawal), not counted in the grade point average; AU (audit), no credit earned and not counted in the grade point average; $\mathbf{C r}$ (credit), signifying units earned, but
not counted in the grade point average; $\mathbf{N C}$ (no credit), no credit earned and not counted in the grade point average; I (incomplete authorized), no credit earned and not counted in the grade point average until one calendar year has expired at which time it will be changed to an IC (incomplete charged) and will count as an F for grade point average computation; WU (withdrawal unauthorized), will count as an $F$ for grade point average computation.

## Plus/Minus Grading

A plus/minus grading system is utilized at San Diego State University. Plus/minus grading is not mandatory but is utilized at the discretion of the individual instructor. The grades of $A+, F+$ and $F$ - are not issued. The decimal values of plus and/or minus grades are utilized in the calculation of grade point averages as follows:

| $\mathrm{A}=4.0$ | $\mathrm{C}+=2.3$ | $\mathrm{D}-=0.7$ |
| :--- | :--- | :--- |
| $\mathrm{~A}-=3.7$ | $\mathrm{C}=2.0$ | $\mathrm{~F}=0$ |
| $\mathrm{~B}+=3.3$ | $\mathrm{C}-=1.7$ | $\mathrm{WU}=0$ |
| $\mathrm{~B}=3.0$ | $\mathrm{D}+=1.3$ | $\mathrm{I}=0$ |
| $\mathrm{~B}-=2.7$ | $\mathrm{D}=1.0$ | $\mathrm{IC}=0$ |

Faculty members use all grades from $A$ through $F$ to distinguish among levels of academic accomplishment. The grade for average undergraduate achievement is $C$.

## Computation of Grade Point Average

To compute the grade point average, the total number of grade points earned is divided by the number of units attempted. Units earned with a Cr (Credit) are not included in the computation. A grade of I (incomplete authorized) is not counted in the grade point computation until one calendar year has expired, at which time it will be charged as an IC (incomplete charged) grade and will count as an $F$. The minimum grade point average for a bachelor's degree is $2.0(\mathrm{C})$; in other words, you must have earned at least twice as many grade points as units attempted.

## Report in Progress Grade - RP

The RP symbol is used in connection with courses that extend beyond one academic term. It indicates that work is in progress and has been evaluated and found to be satisfactory to date, but that assignment of a precise grade must await completion of additional work. Work is to be completed within a stipulated time period not to exceed one year except for graduate thesis (799A) or dissertation (899). An additional exception shall be made for Research (797) in which time period is not to exceed two years. Graduate courses for which the RP symbol is appropriate are specifically designated in the departmental listings of the Graduate Bulletin.

Candidates for graduation whose record carries a grade of RP will be graduated provided they are otherwise eligible for graduation. However, the RP cannot be made up after the degree has been granted. If students do not wish to be graduated with the grade of RP on their record, they must officially cancel their application for graduation.

## Withdrawal Grade - W

The symbol "W" indicates that you were permitted to drop a course after the 10th day from the first day of classes because of a verified serious and compelling reason, and you have obtained the signature of the instructor and the approval of the dean or designee of the college in which the class is located.

Dropping a class is not permitted after 7:59 p.m. on the 10th day from the first day of classes, except in cases such as accident or serious illness where the cause of dropping the class is due to circumstances clearly beyond your control, and the assignment of an incomplete is not practicable. All such requests must be accompanied by appropriate verification. Ordinarily, withdrawals in this category will involve total withdrawal from the university, except that credit, or an Incomplete, may be assigned for courses in which sufficient work has been completed to permit an evaluation to be made. Requests to withdraw under such circumstances must be signed by each instructor, who indicates your grade status in the class, and approved by the dean or designee of the college of your major.

After the last day of instruction for the semester, if you wish to change assigned grades to W grades you must request to withdraw from the full semester's work; no requests for individual classes will be accepted. Total withdrawal requests may be granted only in verified cases such as accident or serious illness
where the cause for substandard performance was due to circumstances clearly beyond your control. Only those retroactive changes from an assigned grade to a W which are approved by the instructor who assigned the original grade will be made, except that (a) the dean or designee of the college of your major may authorize the change of WU to W, and (b) department chairs shall act on behalf of instructors no longer affiliated with the university.

## Auditing - AU

Enrollment as an auditor is subject to permission of the instructor, provided that enrollment in a course as an auditor shall be permitted only after students otherwise eligible to enroll on a credit basis have had an opportunity to do so. Auditors are subject to the same fee structure as credit students and regular class attendance is expected. Failure to meet required class attendance may result in an administrative drop of the course. Units taken for audit are not used in the calculation of enrollment status. To enroll as an auditor, obtain the Change to Audit Grade form from the Office of the Registrar. Obtain instructor approval and return the completed form by before 4 p.m. on the 10th day from the first day of classes to the Office of the Registrar. Once enrolled as an auditor, you may not change to credit status unless such a change is requested by $4 \mathrm{p} . \mathrm{m}$. on the 10th day from the first day of classes. Graduate students cannot use audited courses to fulfill a degree requirement.

## Credit/No Credit - Cr/NC

## (Undergraduate Student Option)

An undergraduate student may elect to be graded credit/no credit in particular courses, subject to the following conditions:

1. Upper division courses graded credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ), whether taken at this or at another institution, may not be used to satisfy requirements for your major or minor except for those courses identified in the course listing as graded $\mathrm{Cr} / \mathrm{NC}$.
2. Courses graded credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ) may not be used to satisfy I. Communication and Critical Thinking and II. Foundations of Learning A. 4 Mathematics/Quantitative Reasoning sections of General Education.
3. No more than 15 units graded credit/no credit may be offered in satisfaction of the total units required in a bachelor's degree program, except that all units accepted as transfer credit from another institution at the time of your admission may be used. If 15 or more units graded credit/no credit are transferred, you may not use additional courses graded credit/no credit to satisfy total units required for a bachelor's degree. Exceptions to this rule will be made only if you are required to take an SDSU course on a credit/no credit basis.
4. Units for courses required for graduation which are offered for $\mathrm{Cr} / \mathrm{NC}$ only will not be counted as part of the 15 elective units of $\mathrm{Cr} / \mathrm{NC}$ allowed.
5. If for any reason (change of major or minor or transfer from another institution) upper division courses graded credit/no credit are offered to satisfy requirements in the major, you may be required by the major department to pass competency examinations at an acceptable level or take prescribed alternate courses before being allowed to continue in the major.
6. Change in grading basis may be made through the SDSU WebPortal on or before the 10th day of instruction by 7:59 p.m. No changes in grading basis are permitted after that date.
7. A grade of Credit is awarded for work equivalent to all grades which earn 2.0 or more grade points (A through C). No Credit is awarded for work equivalent to all grades which earn less than 2.0 grade points ( $C$ - through $F$ ).
8. The only courses which may be repeated with a credit/no credit option are those in which you previously received a grade of No Credit. If a course previously taken for a grade is repeated for a grade of Credit, the original grade will continue to be used in computation of the grade point average.
NOTE: NC is not calculated in the grade point average at San Diego State University. However, some institutions, particularly for graduate admissions, calculate an NC as an F.

## Incomplete Authorized Grade - I

(Undergraduate Student Option)
The symbol I (incomplete authorized) indicates that a portion of required coursework has not been completed and evaluated in
the prescribed time period due to unforeseen, but fully justified, reasons and that there is still a possibility of earning credit. It is your responsibility to bring pertinent information to the instructor and to reach agreement on the means by which the remaining course requirements will be satisfied. The conditions for removal of the Incomplete shall be stated on the Incomplete agreement form that is processed by the instructor when grades are submitted. A copy of the Incomplete agreement will be available to the student, the instructor, and department via SDSU WebPortal at http://www.sdsu.edu/portal. A final grade is assigned when the work agreed upon has been completed and evaluated. An Incomplete shall not be assigned when the only way the student could make up the work would be to attend a major portion of the class when it is next offered.

An Incomplete must be made up within one calendar year immediately following the end of the term in which it was assigned; however, faculty have the option to assign a deadline that is less than one year. This limitation prevails whether or not the student maintains continuous enrollment. The I (incomplete authorized) grade must be resolved prior to the student's graduation date, even if it is less than a year. Failure to do so will result in a cancellation of the student's graduation application. Failure to complete the assigned work within one calendar year will result in an Incomplete being converted to an IC symbol, which would become the final grade on the student's record at the end of the calendar year deadline. After one calendar year, the only way the student may eliminate that grade from the grade point calculation is to repeat the course and file a petition for course forgiveness (see Repeated Courses below). In any case, because a student's record must provide an accurate and complete accounting of the student's academic history, the notation of Incomplete will remain on the record.

An incomplete may not be made up after you have graduated. Incomplete Charged Grade - IC

The symbol IC (incomplete charged) may be used when a student who received an I (incomplete authorized) has not completed the required coursework within the allowed time limit. The IC is posted to the record at the end of the one year time limit and is counted as a failing grade for grade point average and progress point computation. Re-registering for a course in which a grade of I (incomplete authorized) was initially assigned does not remove the outstanding grade.

## Withdrawal Unauthorized Grade - WU

The symbol WU indicates that a student enrolled in a course, did not withdraw from the course, but failed to complete course requirements. It is used when, in the opinion of the instructor, the number of completed assignments or course activities or both were insufficient to make possible a normal evaluation of academic performance. For purposes of grade point average computation, this symbol is equivalent to an F . If the student attended a portion of a course and then, after receiving failing grades, stopped attending without officially withdrawing, a final grade of F not WU should be assigned. Graduate students who have successfully repeated a WU graded course may petition the Division of Graduate Affairs for a possible grade point average adjustment.

## Good Standing

Academic standing for undergraduate students at San Diego State University is determined by the grade point average a student earns in university areas. At the undergraduate level, good academic standing means that the student has an overall cumulative GPA and an SDSU cumulative GPA of 2.0 or better. (Students should note that in order to graduate, they also need a GPA of 2.0 in the major.) Post-baccalaureate students should refer to the Graduate Bulletin.

## Repeated Courses

## (Undergraduate Student Option)

A student who receives a grade of C-or lower (fewer than 2.0 grade points per unit) may request that the course repeat policy for grade forgiveness be applied to that course. Students may request a maximum of 16 units for course forgiveness, with the constraint that no more than one course may be an upper division course. Course forgiveness is only applicable to undergraduate students. The course repeat policy shall be applied to
courses taken at San Diego State University, except where enrollment is restricted or the student no longer qualifies for admission to a course.

1. A course may be repeated once for grade forgiveness. Although the original grade(s) shall remain on the transcript, only the latest grade shall be used in calculating grade point averages. Courses taken in summer term and courses taken through Open University shall be counted for grade forgiveness.
2. If a student repeats a course in which a grade of $C$ (2.0) or better was received, only the original grade and units earned shall be used for calculation of grade point average and units needed for the degree. In addition, the only courses that may be repeated with a credit/no credit option are those in which the student previously received a grade of no credit; if a course taken for a grade is repeated credit/no credit, the original grade shall continue to be used in computing grade point average.
3. The repeat policy for grade forgiveness for a specific course shall be applied automatically unless the student notifies the Office of the Registrar before the end of the change of program period. The grade earned in that course that semester or session shall be used to calculate grade point averages. In cases where a student exceeds the allowed number of grade forgiveness, he or she shall have the right to define which courses receive grade forgiveness.
4. A course shall not be repeated for grade forgiveness by a student found by the Office of Student Rights and Responsibilities to be guilty of academic dishonesty in that course.
5. Enrollment in a repeated course shall not be allowed if the student has already cumulatively repeated 28 units of coursework.

## Assignment of Grades and Grade Appeals

Faculty have the right and responsibility to provide evaluation and timely assignment of appropriate grades. There is a presumption that grades assigned are correct. It is the responsibility of anyone appealing an assigned grade to demonstrate otherwise.

If you believe that an appropriate grade has not been assigned you should first seek to resolve the matter with the instructor of record. If the matter cannot be resolved informally, you may present the case to the appropriate campus entity, have it reviewed and, where justified, receive a grade correction. Requests to improve an earned grade assigned at the end of a semester by completing additional coursework are not considered. It is your responsibility to attempt to resolve grade disputes in a timely manner, typically during the semester following the semester the questioned grade was received. If 12 or more months have elapsed since the grade was issued, or you have graduated, no grade change will be considered.

## Dean's List

The Dean's List recognizes academic achievement within a single fall semester or spring semester. To be eligible for the Dean's List, students must be in good academic standing, matriculated, and have a grade point average of at least 3.50 based on a minimum of 12 units of credit for courses in which letter grades were assigned. The computation of grade points will be made six weeks after the end of the semester to include students who complete Incomplete grades promptly.

Students will be recognized by the dean of their respective college; undeclared and interdisciplinary studies in three departments will be listed by the Division of Academic Engagement and Student Achievement.

## Graduation With Honors and Distinction

Graduation with honors is granted to undergraduate students who achieve high grade point averages. Excellence is recognized at three levels:

- cum laude (3.50-3.64)
- magna cum laude (3.65-3.79)
- summa cum laude (3.80-4.00)

For determination of eligibility, two grade point averages are computed; both must satisfy the minimum grade point average for appropriate honors designation. They are the GPA calculated on all units taken at this institution (a minimum of 24 graded units), and the overall (cumulative) grade point average (including both SDSU and transfer units).

Grades for the final semester's work are included in calculation of eligibility for graduation with honors. Students are tentatively designated as eligible for graduation with honors if both grade point averages meet required standards at the beginning of the fall semester for midyear graduates and at the end of the fall semester for May and summer term graduates. Notation of cum laude, magna cum laude, or summa cum laude on transcripts and diplomas is based on achievement when all courses for graduation are completed. Second bachelor's degree in nursing candidates are not eligible for graduation with honors.

Upon recommendation of their major department, students doing superior work in their major field may be graduated with distinction in that field. To qualify for Distinction in the Major, a student must have a minimum 3.50 grade point average in the major (upper division courses) by the beginning of the fall semester for midyear graduates and by the end of the fall semester for May and summer term graduates. Departments may set a higher GPA or additional criteria. Second bachelor's degree in nursing candidates are eligible for Distinction in the Major.

To be considered for computation of the major grade point average, grades for removal of Incomplete and all other grade changes must be received in the Office of the Registrar no later than the end of the fifth week of the semester in which the student plans to graduate. All changes for summer term graduates must be received by the end of the fifth week of the spring semester prior to graduation.

## Final Examinations

No final examination shall be given to individual students before the regular time. If you find it impossible to take a final examination on the date scheduled you must make arrangements with the instructor to have an incomplete grade reported and must take the deferred final examination within the time allowed for making up incomplete grades.

## Evaluation

An evaluation is a summary of college work completed and of requirements to be completed for a bachelor's degree. New transfer students will receive an evaluation at the new student orientation. Transfer courses will be included, where applicable, to meet San Diego State University's degree requirements. Students admitted as freshmen will receive an evaluation at the new student orientation. Continuing students may request updates to the evaluation at the Academic Advising Center, located in Student Services West, Room 1551 or on the SDSU WebPortal at http://www.sdsu.edu/portal.

## Academic Credit Through Coursework

## Credit for Upper Division Courses

Normally, only juniors, seniors, and graduate students enroll in upper division courses (numbered 300 through 599). However, a freshman or sophomore may enroll in an upper division course for upper division credit if the instructor consents. Article 40405.2 of Title 5, California Code of Regulations specifically limits upper division general education credit to students who have achieved upper division status.

## Community College Credit

A maximum of 70 semester units earned in a community college may be applied toward the degree, with the following limitations: (a) no upper division credit may be allowed for courses taken in a community college; (b) no credit may be allowed for professional courses in education taken in a community college, other than an introduction to education course.

## Concurrent Master's Degree Credit

The bachelor's degree must be earned at the end of the semester or term in which the concurrent credit is earned. Concurrent advanced degree credit may be earned during the final semester of the undergraduate degree. Concurrent credit will not be granted retroactively.

Senior undergraduate students requesting to take concurrent master's degree credit must petition the Graduate Dean and meet the following criteria:

1. A senior who has met all of the freshman writing and mathematics testing requirements or is currently registered in coursework;
2. Have a minimum grade point average of at least a 3.0 in the last 60 semester units attempted;
3. Student is within 12 units of completing requirements for the bachelor's degree;
4. Attempts no more than a maximum of 15 units. The maximum number of units that may be earned as concurrent master's degree credit is determined by the difference between the number of units remaining for the bachelor's degree and 15;
5. Courses taken for concurrent advanced degree credit must be approved by the department. Courses are to be at the 500numbered and certain 600-and 700-numbered courses;
6. Petitions may be obtained from the Division of Graduate Affairs and must be submitted to the Office of Advising and Evaluations by the end of the third week of classes of the semester or term in which the concurrent credit is earned;
7. The student must have on file a current application for graduation with the bachelor's degree.

## Concurrent Post-Baccalaureate Credit

## Applicable to the Fifth Year Credential Requirement

Concurrent post-baccalaureate credit may be earned during the final semester or summer term by seniors admitted to the College of Education who meet all of the following qualifications:

1. Have a minimum grade point average of 2.85 on the last 60 units attempted.
2. Complete coursework in excess of graduation requirements during the semester (or summer term) when graduation occurs.
3. Attempt no more than 21 units during the final undergraduate semester.
4. Request no more than a maximum of 12 units of $300,400,500$, or 900-numbered courses for post-baccalaureate credit.
5. Petition the assistant dean of the College of Education.
6. Submit petition before the end of the first week of classes of the final undergraduate semester (or term) when graduation occurs.
7. Graduate at the end of the semester (or summer term) the petition is made.
Extension courses are not acceptable for concurrent post-baccalaureate credit. Concurrent post-baccalaureate credit will not be granted retroactively.

Petition forms are available in the Office of the Registrar, Student Services West, Room 1641.

## Credit for Extension Courses

The maximum amount of extension and correspondence credit which may be accepted toward the minimum requirements for the bachelor's degree is 24 semester units. Extension and correspondence credit are not counted in satisfaction of the minimum residence requirement. A maximum of nine units in extension courses at San Diego State University may be accepted as part of the requirements for the master's degree, Graduate students are subject to limitations described in the Graduate Bulletin.

Continuing education courses offered by departments are of two kinds. The first includes regular courses listed in the General Catalog which are available for use by students in meeting college and university credit requirements of various kinds, and are usually at the upper division level. A second kind is offered by some departments at the X-01 through X-79 and X-397 level and serves to meet the needs of specific community groups.

Courses numbered 80 through 99 are nonbaccalaureate level and are not acceptable for a bachelor's degree; those numbered 100 through 299 are in the lower division (freshman and sophomore years); those numbered 300 through 499 are in the upper division (junior and senior years) and intended for undergraduates; those numbered 500 through 599 are in the upper division and are also acceptable for advanced degrees when taken by students admitted to graduate standing; those numbered 600 through 799 are graduate courses; and those numbered 800 through 899 are doctoral courses. Courses numbered at the 900 level, except 997, are reserved for graduate courses in certain professional curricula as part of advanced certificate, credential, and licensure programs and are specifically intended for students admitted to the university with post-baccalaureate classified standing. Courses numbered at the 900 level are not applicable to other graduate programs.

Courses numbered X-01 through X-79 and X-397 are Extension professional development units offered only through Extension to meet specific academic needs of community groups and are not acceptable toward an undergraduate or graduate degree.

## Academic Credit Through Examination

San Diego State University grants credit for passing scores on The College Board Advanced Placement examinations, on certain College-Level Examination Program tests, and on International Baccalaureate higher level subjects. SDSU also grants credit for locally administered credit by examination tests. A total of 30 units will be allowed for credit earned through examination (excluding Advanced Placement and International Baccalaureate). The details in each case are provided in the tables in this section of the catalog.

## Credit for Advanced Placement Examinations

San Diego State University grants credit toward its undergraduate degrees for successful completion of examinations of the Advanced Placement Program of the College Board.

High school students who intend to participate in this program should make the necessary arrangements with their high schools and should indicate at the time they take the Advanced Placement examinations that their test scores be sent to San Diego State University. To obtain credit and advanced placement, you should contact the Office of Advising and Evaluations.

The Advanced Placement Credit table in this section of the catalog indicates the units granted for the score attained and the course equivalents for each of the examinations offered.

## Credit for College-Level Examination Program (CLEP)

The university grants credit on 34 CLEP Subject Examinations. See the Academic Credit Through Examination table in this section of the catalog.

## Credit for International Baccalaureate Certificates or Diplomas

San Diego State University normally grants six units of credit for each International Baccalaureate Higher Level subject examination passed with a score of 4 or better. To receive credit, you must request that your International Baccalaureate transcript of grades be sent to San Diego State University's Office of Advising and Evaluations.

The International Baccalaureate Credit table identifies established course equivalencies. Subject examinations not listed in the table will be evaluated for appropriate course credit by the departmental adviser.

University Policies

| Advanced Placement Credit |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Semester unit credit allowed towards degree |  |  |  |  |
| Examination | Score |  | SDSU course equivalents* | Remarks |
| Art History | 3, 4, 5 | 6 | Art 258 and 259 |  |
| Art: |  |  |  |  |
| Drawing | 3, 4, 5 | 3 | Art 100 |  |
| 2-D Art and Design | 3,4,5 | 3 | Art 101 |  |
| 3-D Art and Design | 3,4,5 | 3 | Art 103 |  |
| Biology | 3,4,5 | 6 | Biology 100, 100L and 2 units of Biology 299 |  |
| Chemistry | 3, 4, 5 | 6 | Chemistry 200 and 201 |  |
| Chinese Language and Culture | 3, 4, 5 | 6 | Chinese 202 and 1 unit of Chinese 296 | Satisfies the language requirement. |
| Classics: |  |  |  |  |
| Latin | 3,4 | 6 | Classics 202L |  |
|  | 5 | 6 | Classics 202L and 303L*** |  |
| Computer Science |  |  |  |  |
| A | 3 | 3 | Computer Science 299 |  |
|  | 4,5 | 3 | Computer Science 107 |  |
| Computer Science Principles | 3,4,5 | 6 | Computer Science 100 and 299 | Satisfies freshmen mathematics competency. |
| Economics: |  |  |  |  |
| Macro | 3,4,5 | 3 | Economics 101 |  |
| Micro | 3, 4, 5 | 3 | Economics 102 |  |
| English: |  |  |  |  |
| Lang. and Comp. | 3, 4 | 6 | Rhetoric and Writing Studies 100 and 3 units of Rhetoric and Writing Studies 299 | Satisfies freshmen writing competency. |
|  | 5 | 6 | Rhetoric and Writing Studies 100 and 200 | Satisfies freshmen writing competency. |
| Lit. and Comp. | 3,4,5 | 6 | English 220 and Rhetoric and Writing Studies 100 | Satisfies freshmen writing competency. |
| Environmental Science | 3, 4, 5 | 4 | Environmental Science 100 and 1 unit of Environmental Science 299 | Satisfies Foundations of Learning Physical Sciences and Laboratory. |
| French Language and Culture | 3 | 6 | French 201 and 210 | Satisfies the language |
|  | 4,5 | 6 | French 221 | requirement. |
| Geography: |  |  |  |  |
| Human Geography | 3,4,5 | 3 | Geography 102 |  |
| German Language and Culture | 3 | 6 | German 202 | Satisfies the language |
|  | 4,5 | 8 | German 205A and 205B | requirement. |
| History: |  |  |  |  |
| United States | 3,4,5 | 6 | History 109 and 110 | Satisfies American History/Institutions and Ideals, and U.S. Constitution requirements. Does not satisfy California Government requirement. |
| European | 3,4,5 | 6 | History 106 and 3 units of History 299 |  |
| World History: Modern | 3, 4, 5 | 3 | History 101 |  |
| Italian Language and Culture | 3 | 6 | Italian 201 | Satisfies the language |
|  | 4 | 6 | Italian 201 and 211 | requirement. |
|  | 5 | 6 | Italian 211 and 212 |  |
| Japanese Language and Culture | 3 | 6 | Japanese 111 and 112 |  |
|  | 4 | 6 | Japanese 111, 112, and 211 | Satisfies the language |
|  | 5 | 6 | Japanese 111, 112, 211, and 212 | requirement. |
| Mathematics: |  |  |  |  |
| Calculus AB/AB Subscore | 3 | 6 | Mathematics 120 and 141 | Satisfies freshmen mathematics competency. |
|  | 4,5 | 4 | Mathematics 150 | Satisfies freshmen mathematics competency. |
| Calculus BC | 3 | 7 | Mathematics 141 and 150 | Satisfies freshmen mathematics competency. |
|  | 4,5 | 8 | Mathematics 150 and 151 | Satisfies freshmen mathematics competency. |
| Calculus BC and AB Subscore | 3 | 7 | Mathematics 141 and 150 | Satisfies freshmen mathematics competency. |
|  | 4,5 | 8 | Mathematics 150 and 151 | Satisfies freshmen mathematics competency. |
| Calculus $A B$ and $B C$ | 3 | 7 | Mathematics 141 and 150 | Satisfies freshmen mathematics competency. |
|  | 4,5 | 8 | Mathematics 150 and 151 | Satisfies freshmen mathematics competency. |
| Calculus $A B, B C$, and $A B$ Subscore | 3 | 7 | Mathematics 141 and 150 | Satisfies freshmen mathematics competency. |
|  | 4,5 | 8 | Mathematics 150 and 151 | Satisfies freshmen mathematics competency. |
| Music Theory | 3,4,5 | 6 | Music 205A and 205B** |  |
| Physics: |  |  |  |  |
| 1 | 3, 4, 5 | 4 | Physics 180A and 182A |  |
| 2 | 3, 4, 5 | 4 | Physics 180B and 182B |  |
| C (Mechanics) | 3,4,5 | 4 | Physics 195 and 195L |  |
| C (Electricity and Magnetism) | 3, 4, 5 | 4 | Physics 196 and 196L |  |
| Political Science |  |  |  |  |
| Govt./Politics: Comparative | 3,4,5 | 3 | Political Science 103 | Satisfies U.S. Constitution requirement. Does not satisfy California Government requirement. |
| Govt./Politics: United States | 3,4,5 | 3 | Political Science 102 |  |
| Govt./Politics: United States and Comparative | 3, 4, 5 | 6 | Political Science 102 and 103 |  |
| Psychology | 3,4,5 | 3 | Psychology 101 |  |
| Research | 3,4,5 | 3 | General Studies 299 |  |
| Seminar | 3, 4, 5 | 3 | General Studies 299 |  |
| Spanish Language and Culture | 3 | 6 | Spanish 201 and 211 | Satisfies the language requirement. |
|  | 4,5 | 6 | Spanish 202 and 212 |  |
| Spanish Literature and Culture | 3,4,5 | 6 | Spanish 395 and 401 |  |
| Statistics | 3, 4, 5 | 3 | Statistics 250 | Satisfies freshmen mathematics competency. |

[^21]| College Level Examination Credit |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Examination | Passing Score | Credit Granted | SDSU course equivalency* | General education credit |
| Business |  |  |  |  |
| Business Law, Introductory | 50 | 3 | No | No |
| Financial Accounting | 50 | 3 | No | No |
| $\wedge$ Information Systems | 50 | 3 | No | No |
| Principles of Management | 50 | 3 | No | No |
| Principles of Marketing | 50 | 3 | No | No |
| Composition and Literature |  |  |  |  |
| American Literature | 50 | 3 | No | Foundations of Learning: Arts and Humanities, Humanities. |
| Analyzing and Interpreting Literature | 50 | 3 | No | Foundations of Learning: Arts and Humanities, Humanities. |
| College Composition | 50 | 6 | No | Communication and Critical Thinking: Written Communication and Critical Thinking. |
| College Composition Modular | 50 | 6 | No | Communication and Critical Thinking: Written Communication and Critical Thinking. |
| English Literature | 50 | 3 | No | Foundations of Learning: Arts and Humanities, Humanities. |
| Humanities | 50 | 3 | Humanities 101 |  |
| Foreign Language |  |  |  |  |
| French Language, Level 1 | 50 | 6 | No | Foundations of Learning: Arts and Humanities, Humanities. |
| French Language, Level 2 | 59 | 12 | No | Foundations of Learning: Arts and Humanities, Humanities. Satisfies language requirement. |
| German Language, Level 1 | 50 | 6 | No | Foundations of Learning: Arts and Humanities, Humanities. |
| German Language, Level 2 | 60 | 12 | No | Foundations of Learning: Arts and Humanities, Humanities. Satisfies language requirement. |
| Spanish Language, Level 1 | 50 | 6 | No | Foundations of Learning: Arts and Humanities, Humanities. |
| Spanish Language, Level 2 | 63 | 12 | No | Foundations of Learning: Arts and Humanities, Humanities. Satisfies language requirement. |
| Spanish with Writing, Level 1 | 50 | 6 | No | Foundations of Learning: Arts and Humanities, Humanities. |
| Spanish with Writing, Level 2 | 65 | 12 | No | Foundations of Learning: Arts and Humanities, Humanities. Satisfies language requirement. |
| History and Social Science |  |  |  |  |
| \#American Government | 50 | 3 | Political Science 102 | U.S. Constitution |
| Educational Psychology, Introduction to | 50 | 3 | No | No |
| History of the United States I | 50 | 3 | History 109 | American History and U.S. Constitution |
| \#History of the United States II | 50 | 3 | History 110 | American History |
| Human Growth and Development | 50 | 3 | No | Foundations of Learning: Social and Behavioral Sciences or Lifelong Learning and SelfDevelopment. |
| Macroeconomics, Principles of | 50 | 3 | Economics 101 |  |
| Microeconomics, Principles of | 50 | 3 | Economics 102 |  |
| Psychology, Introductory | 50 | 3 | Psychology 101 |  |
| Social Sciences and History | 50 | 6 | No | Foundations of Learning: Social and Behavioral Sciences; Arts and Humanities, Humanities. |
| Sociology, Introductory | 50 | 3 | Sociology 101 |  |
| ~ Western Civilization I | 50 | 3 | History 105 |  |
| - Western Civilization II | 50 | 3 | History 106 |  |
| Science and Mathematics |  |  |  |  |
| Biology | 50 | 3 | Biology 100 |  |
| Calculus | 50 | 3 | No | Foundations of Learning: Mathematics/Quantitative Reasoning. |
| Chemistry | 50 | 6 | Chemistry 200 |  |
| College Algebra | 50 | 3 | No | Foundations of Learning: Mathematics/Quantitative Reasoning. |
| College Mathematics | 50 | 3 | No | Foundations of Learning: Mathematics/Quantitative Reasoning. |
| Natural Sciences | 50 | 3 | Biology 100 |  |
| Precalculus | 50 | 3 | Mathematics 141 |  |
| ${ }^{*}$ Credit may not be earned at SDSU for courses which duplicate credit already allowed for examinations as listed under SDSU course equivalents. <br> ^Prior to October 2015, examination formerly titled Information Systems and Computer Applications. <br> \#Does not satisfy the American Institutions California Government requirement. <br> ~Extended title is Western Civilization I: Ancient Near East to 1648. <br> ${ }^{\circ}$ Extended title is Western Civilization II: 1648 to Present. |  |  |  |  |


| International Baccalaureate Credit |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Semester unit credit allowed towards degree |  |  |  |  |
| Examination | Score |  | SDSU course equivalents* | Remarks |
| Arabic B | Higher 4-7 | 6 | Arabic 202 | Satisfies language graduation requirement and lower division prerequisites. |
| Biology | Higher 5-7 | 6 | Biology 100 and 100L | Two additional units of Biology 299. |
| Business and Management | Higher 5-7 | 3 | Business Administration 299 |  |
| Chemistry | Higher 5-7 | 6 | Chemistry 100 | Two additional units of Chemistry 299. |
| Chinese B-Mandarin | Higher 4-7 | 6 | Chinese 201 and 1 unit of Chinese 296 | Satisfies language graduation requirement. |
| Classical Languages |  |  |  |  |
| Greek B | Higher 4-7 | 6 | Classics 101G and 202G |  |
| Latin B | Higher 4-7 | 6 | Classics 101L and 202L |  |
| Computer Science | Higher 4-7 | 3 | Computer Science 100 | Satisfies freshmen mathematics competency. |
| Dance | Higher 4-7 | 3 | Dance 299 | Satisfies Foundations of Learning: Arts and Humanities, Arts.. |
| Design Technology | Higher 5-7 | 3 | Sustainability 299 |  |
| Economics | Higher 5-7 | 6 | Economics 101 and 102 |  |
| English A: Language and Literature | Higher 4-7 | 6 | English 220 and Rhetoric and Writing Studies 100 | Satisfies freshmen writing competency. |
| English A: Literature | Higher 4-7 | 6 | English 220 and Rhetoric and Writing Studies 100 | Satisfies freshmen writing competency. |
| Film | Higher 4-7 | 3 | Television, Film and New Media 160 |  |
| French B | Higher 4-7 | 6 | French 221 | Satisfies language graduation requirement and lower division prerequisites. |
| Geography | Higher 5-7 | 6 | Geography 101 and 102 |  |
| German B | Higher 4-7 | 6 | German 202 and 205B | Satisfies language graduation requirement and lower division prerequisites. |
| Global Politics | Higher 5-7 | 3 | Political Science 104 |  |
| Hindi B | Higher 4-7 | 6 | Linguistics 299 | Satisfies Foundations of Learning: Arts and Humanities, Humanities, and language graduation requirement. |
| History (any region) | Higher 5-7 | 6 | History 100 and 101 |  |
| Indonesian B | Higher 4-7 | 6 | Linguistics 299 | Satisfies Foundations of Learning: Arts and Humanities, Humanities, and language graduation requirement. |
| Information Technology in a Global Society | Higher 5-7 | 3 | Management Information Systems 299 |  |
| Italian B | Higher 4-7 | 6 | Italian 211 and 212 | Satisfies language graduation requirement and lower division prerequisites. |
| Japanese B | Higher 4-7 | 6 | Japanese 211 and 212 | Satisfies language graduation requirement and lower division prerequisites. |
| Korean B | Higher 4-7 | 6 | Korean 202 | Satisfies language graduation requirement and lower division prerequisites. |
| Mathematics | Higher 4-7 | 6 | Mathematics 118 | Three additional units of Mathematics 299. Satisfies freshmen mathematics competency. |
| Music | Higher 4-7 | 3 | Music 299 | Satisfies Foundations of Learning: Arts and Humanities, Arts. |
| Norwegian B | Higher 4-7 | 6 | Linguistics 299 | Satisfies Foundations of Learning: Arts and Humanities, Humanities, and language graduation requirement. |
| Philosophy | Higher 4-7 | 3 | Philosophy 299 | Satisfies Foundations of Learning: Arts and Humanities, Humanities. |
| Physics | Higher 5-7 | 6 | Physics 180A and 182A | Two additional units of Physics 299. |
| Portuguese B | Higher 4-7 | 6 | Portuguese 102 |  |
| Psychology | Higher 5-7 | 3 | Psychology 101 |  |
| Russian B | Higher 4-7 | 6 | Russian 200A and 200B | Satisfies language graduation requirement and lower division prerequisites. |
| Social and Cultural Anthropology | Higher 4-7 | 3 | Anthropology 102 |  |
| Spanish B | Higher 4-7 | 6 | Spanish 202 and 212 | Satisfies language graduation requirement and lower division prerequisites. |
| Sports, Exercise and Health Science | Higher 5-7 | 3 | Exercise and Nutritional Sciences 299 | Satisfies Foundations of Learning: Lifelong Learning and Self-Development. |
| Swedish B | Higher 4-7 | 6 | Linguistics 299 | Satisfies Foundations of Learning: Arts and Humanities, Humanities, and language graduation requirement. |
| Theatre | Higher 4-7 | 6 | Theatre 100 | Three additional units of Theatre 299. |
| Visual Arts | Higher 4-7 | 3 | Art 299 |  |
| *Credit may not be earned at SDSU for courses which duplicate credit already allowed for examinations as listed under SDSU course equivalents. |  |  |  |  |

## Credit by SDSU Examinations

(Undergraduate Student Option)
Students may challenge a course by taking an examination developed at San Diego State University. To apply for credit by examination, the student should check with the appropriate department(s) since each department has the option of excluding any of its courses from credit by examination or of setting special conditions on the student requesting this option.

Approval to receive undergraduate credit by examination is granted at the discretion of the appropriate college authorities and under the following conditions:

1. The student must be matriculated, in good standing (not on probation) and registered in at least one regular course (not extension or Open University) at the time credit by examination is authorized but NOT registered in the class to be challenged.
2. The student cannot have been enrolled in the course (graded or withdrawn, SDSU or other campus) or enrolled in a comparable course at a more advanced level.
3. A course may be challenged only once.
4. Forms are available from the Office of the Registrar. The student will be required to complete the form, pay $\$ 100$ to the SDSU Cashiers Office, attach the receipt to the form, obtain the signature of the department chair or school director and the dean of the college, and submit the form to the Office of the Registrar.
5. Credit by examination is restricted to regular undergraduate courses listed in the General Catalog, does not include 600 - and 700 -numbered or extension courses, and does not count as residence credit.
6. Lower-division language courses cannot be challenged.
7. The grade awarded will be either Cr (credit) or NC (no credit).
8. A maximum of 30 units can be awarded for credit by examination.
9. Credit by examination is not treated as part of your study load and, therefore, is not considered by the Veterans Administration in the application of their regulations, and is not always accepted as transfer credit between collegiate institutions.
10. Student is not to enroll in the course. Credit will be posted on the transcript.

## Academic Credit for Non-Collegiate Instruction

San Diego State University grants undergraduate degree credit for successful completion of non-collegiate instruction, either military or civilian, appropriate to the baccalaureate degree, that has been recommended by the Commission on Educational Credit and Credentials of the American Council on Education. The number of units allowed are those recommended in the Guide to the Evaluation of Educational Experience in the Armed Services and the National Guide to Educational Credit for Training Programs.

Credit will be considered to be elective units in most cases. Petitions for acceptance of credits toward specific requirements are available in the Office of Advising and Evaluations. Applicability to specific degree requirements (General Education, major, minor, etc.) is subject to approval of the appropriate campus authority.

## Academic Credit for Military Service

The university is guided by the recommendations of the American Council on Education in granting undergraduate credit toward the bachelor's degree for military service. Postgraduate credit is not granted.

To obtain credit for military service, you must be fully matriculated, be enrolled at the university, and submit a Joint Services Transcript (JST), Form DD-214 or DD-295.

## Student Classification

A matriculated student is one who has complied with all requirements for admission to the university and has received an official notice of admission. All students taking courses in any regular semester must be matriculated students.

Freshman. A student who has earned a total of fewer than 30 semester units.
Sophomore. A student who has earned a total of 30 to 59 semester units, inclusive.

Junior. A student who has earned a total of 60 to 89 semester units, inclusive.

Senior. A student who has earned a total of 90 semester units or more.

Graduate. A student who has completed a four-year college course with an acceptable baccalaureate degree from a regionally accredited institution and who has been admitted to the university with post-baccalaureate standing. For information on classification of graduate students, see the Graduate Bulletin.

## Transcripts of Record

## Official Transcripts

Official transcripts can be ordered online in your SDSU WebPortal at http://www.sdsu.edu/portal under the Official Transcript section. If all your coursework was completed prior to 1987 or if your transcript requires special handling (e.g. via United States Postal Service Priority or Express Mail only), you will need to order official transcripts by completing an Official Transcript Request form and submitting it to the University Cashiers Office. A fee is charged for all transcripts and must be paid in advance. An official transcript is usually mailed within five to seven business days after the request is processed by the Cashiers Office, unless a hold has been indicated. Transcripts from other schools or colleges become the property of this university and will not be released or copied.

## Unofficial Transcripts

You may print an unofficial SDSU transcript by accessing the SDSU WebPortal at http://www.sdsu.edu/portal. If all of your SDSU coursework has been taken since fall 1987, your entire record will be available on the Web. If you completed coursework at SDSU prior to fall 1987 , you must contact the Office of the Registrar to obtain an unofficial transcript reflecting that portion of your record. Unofficial transcripts do not bear the seal of the university and are not suitable for transfer purposes.

## Full-Time Student Status

Full-time student status for undergraduates at SDSU is 12 units per semester. Full-time enrollment for a graduate student is nine units of coursework numbered 500 through 999 (refer to Graduate Bulletin for expanded limits and guidelines). Units taken for audit are not used in the calculation of enrollment status. You can obtain verification of your enrollment from the Office of the Registrar by either of the following methods: (1) in person with proper photo identification in Student Services West, Room 1641; (2) by mailing the request with your authorization and signature, and a stamped, self-addressed envelope to Office of the Registrar, San Diego State University, San Diego, CA 92182-7453. You may also view your enrollment status and/or print a verification form by accessing your SDSU WebPortal at http://www.sdsu.edu/portal and selecting the Enrollment Verification option which will link you to the National Student Clearinghouse.

## Study List Limits

A unit or credit hour represents 50 minutes of lecture or recitation combined with two hours of preparation per week throughout one semester of 15 weeks. Two hours of activity (as in exercise and nutritional sciences) or three hours of laboratory (as in the sciences) are equivalent to one hour of lecture.

During initial registration, students can enroll in a maximum of 17 units or other specified unit total directed by the student's major. During the add-drop period, this limit is removed. You are strongly advised to consider all aspects of your situation before adding additional courses. If you work or have family obligations that will limit the time you can devote to your studies, you are strongly urged to reduce the number of units you attempt each semester.

You should expect to spend a total of three hours per week, in class and study time, for each unit of college work attempted. A normal 16 -unit load, therefore, represents a 48 -hour week. You should also keep in mind that some courses require more than the
average amount of time, and that your workload in all courses will vary throughout the semester as examinations and major papers or projects come due.

## Change of Major

Based on the application for admission, students are admitted to a premajor or designated as a pre-undeclared major. If, after registration, you wish to change your major, you should check with the department of your intended major for requirements and filing periods. Depending on admission status and degree, there may be limitations on a student's ability to change his or her premajor. Check with the Academic Advising Center (SSW-1551) for more information.

Change of Major forms are available at the Office of the Registrar and require approval of the change by the new major department. After approval, return the form to the Office of the Registrar. You will be required to meet the major and minor requirements stated in the General Catalog that are in effect when you submit your change or declaration.

If you are admitted to a premajor, you must complete specific requirements before you will be admitted to the major. Requirements are described in the section of this catalog on Courses and Curricula, or you may contact the major department for information. Requirements are also described in the specific major department section of this catalog. If you are a veteran using veteran benefits, you must obtain appropriate approval from the Veterans Administration for necessary changes in letters of eligibility.

## Academic Renewal

Under certain circumstances the campus may disregard up to two semesters or three quarters of previous undergraduate coursework taken at any college from all considerations associated with requirements for the baccalaureate degree. These circumstances are:

1. All degree requirements, except the earning of at least a $C$ (2.0) grade point average, have or will soon have been met;
2. The student has formally requested such action and has presented evidence that work completed in the term(s) under consideration is substandard and not representative of present scholastic ability and level of performance; and
3. The level of performance represented by the term(s) under consideration was due to extenuating circumstances.
Final determination that one or more terms shall be disregarded shall be based upon a careful review of evidence by a committee appointed by the president which shall include designee of the chief academic officer and consist of at least three members. Such final determination shall be made only when:
4. Five years have elapsed since the most recent work to be disregarded was completed; and
5. The student has earned in residence at the campus since the most recent work being considered was completed, 15 semester units with at least a $3.0 \mathrm{GPA}, 30$ semester units with at least a 2.5 GPA , or 45 semester units with at least a 2.0 GPA . Work completed at another institution cannot be used to satisfy this requirement.
When such action is taken, the student's permanent academic record shall be annotated so that it is readily evident to all users of the record that NO work taken during the disregarded term(s), even if satisfactory, has been applied towards the meeting of degree requirements. However, all work must remain legible on the record ensuring a true and complete academic history.

University policy regarding academic renewal is not intended to permit the improvement of a student's grade point average beyond what is required for graduation.

## Withdrawals

## Official Withdrawal

Students who find it necessary to cancel their registration or to withdraw from all classes after enrolling for any academic term are required to initiate action formally through the Office of the Registrar and follow the university's official withdrawal procedures. Failure to follow formal university procedures may result in an obligation to pay fees as well as the assignment of failing grades in all courses and the need to apply for readmission before
being permitted to enroll in another academic term. Information on canceling registration and withdrawal procedures is available from the Office of the Registrar.

A student who has not paid fees and is not enrolled in at least one class (other than for audit) by 7:59 p.m. on the 10th day from the first day of classes is no longer considered a continuing student and may be required to apply for readmission.

A course will not appear on the permanent record if withdrawal occurs by 7:59 p.m. on the 10th day from the first day of classes. After the 10th class day from the first day of classes, withdrawals are not permitted except in cases where the cause of withdrawal is due to circumstances clearly beyond your control, such as accident or serious illness. All such requests must be accompanied by appropriate verification. Credit or an incomplete may be assigned for courses in which sufficient work has been completed to permit an evaluation to be made. Refer to the Class Schedule for appropriate dates for the deadlines indicated above.

## Withdraw Retroactively

After the last day of instruction for a term, if you wish to change assigned grades to $W$ grades, you must request to withdraw from the full semester's work; no requests for individual classes will be accepted. Total withdrawal requests may be granted only in verified cases such as accident or serious illness where the cause for substandard performance was due to circumstances clearly beyond your control.

Students who receive financial aid funds must consult with the Office of Financial Aid and Scholarships prior to withdrawing from the university regarding any required return or repayment of grant or loan assistance received for that academic term or payment period. If a recipient of student financial aid funds withdraws from the institution during an academic term or a payment period, the amount of grant or loan assistance received may be subject to return and/or repayment provisions.

## Unofficial Withdrawal

If you withdraw unofficially from classes or from the university, you will receive failing grades in all courses that you stop attending. An unofficial withdrawal is one in which you stop attending classes without filing official withdrawal forms within the established deadlines.

Veterans unofficially withdrawing will have veteran's allowances immediately suspended and will be subject to full repayment of allowances received after date of unofficial withdrawal.

## Leaves of Absence

## Educational Leave of Absence

Students are permitted to take up to four semesters of approved leave of absence. Students must apply within the specified time frame for the particular semester they wish to be absent from school. If they wish to take leave for additional semesters, they must do so on a semester-by-semester basis. Students may access the leave of absence request application within the SDSU WebPortal at http://www.sdsu.edu/portal. Educational leaves of absence will be granted only to students who have completed a minimum of one semester at San Diego State University. Leaves will not be granted to students who have been disqualified, students who qualify for a change from undergraduate to graduate status, or students who have specific registration holds. For more information, visit http://arweb.sdsu.edu/es/registrar/leave.html.

## Military Called to Compulsory Service

For information about the policy for Military Called to Compulsory Service, contact the Joan and Art Barron Veterans Center at 619-594-5813.

## Readmission

Students interested in readmission to SDSU should visit the website at http://www.sdsu.edu/admissions for the most up-todate admission criteria. Criteria differ for students who left the university in good academic standing versus those who left on academic probation or who were academically disqualified. Students who have been disqualified twice from SDSU will not be considered for reinstatement. Students with prior SDSU enrollment through regular session, special session, Open University, or cross-enrollment must have a minimum SDSU GPA of 2.0 in all coursework, in addition to meeting all other transfer admission requirements.

## Probation and Disqualification (Undergraduate Student Option)

## Academic Probation

The purpose of probation is to warn students that their academic performance is below the state minimum required for graduation and to indicate that improvement is required before a degree can be granted.

An undergraduate student whose grade point average falls below a C average (2.0) for either all baccalaureate level college work attempted or all work attempted at San Diego State University will be placed on academic probation at the end of the semester.

Provided a student earns a C average (2.0) or better in San Diego State University work during the semester while on academic probation, academic probation may be continued up to a maximum of three semesters.

Academic probation will be lifted when the student has attained a C (2.0) average or better on all baccalaureate level college work attempted and on all work attempted at San Diego State University.

Summer term and Open University courses are included in the SDSU grade point average; Extension courses are calculated only in the overall grade point average.

Grade point average is computed by dividing the number of grade points accumulated by the number of graded units attempted (see chart under Plus/Minus Grading for number of grade points assigned per unit in each grade category.)

## Academic Disqualification

Undergraduate students who are admitted to SDSU in good standing will not be disqualified at the end of their first semester of coursework at San Diego State University. After the first semester, students will be disqualified at the end of the fall or spring semesters if the following conditions exist:

1. A student on probation fails to earn at least a 2.0 grade point average (C average) in San Diego State University work for any semester while on probation, or
2. A student on academic probation still has less than a 2.0 grade point average in all work attempted at San Diego State University at the end of the third semester on probation.
Students who have been disqualified from SDSU will not be allowed to attend regular or Open University classes, or classes through SDSU Global Campus Special Sessions until one year from the date of their disqualification. Students must also reapply for admission to the university and gain acceptance before resuming enrollment in regular SDSU classes after that one year.

## Administrative-Academic Probation

An undergraduate student may be placed on administrative-academic probation by action of appropriate campus officials for any of the following reasons:

1. Withdrawal from all or a substantial portion of a program of studies in two successive terms or in any three terms.
2. Repeated failure to progress toward the stated degree or objective or other program objective, including that resulting from assignment of 15 units of No Credit (when such failure appears to be due to circumstances within the control of the student).
3. Failure to comply, after due notice, with an academic requirement or regulation, as defined by campus policy, which is routine for all students or a defined group of students (examples: failure to list all colleges attended on the application for admission, failure to take placement tests, failure to complete a required practicum, failure to comply with professional standards appropriate to the field of study, failure to complete a specified number of units as a condition for receiving student financial aid or making satisfactory progress in the academic program).

## Administrative-Academic Disqualification

An undergraduate student who has been placed on administra-tive-academic probation may be disqualified from further attendance if:

1. The conditions for removal of administrative-academic probation are not met within the period specified.
2. The student becomes subject to administrative-academic probation while on administrative probation.
3. The student becomes subject to administrative-academic probation for same or similar reason for which the student has been placed on administrative-academic probation previously, although not currently in such status.
In addition, an appropriate campus administrator may disqualify a student who at any time during enrollment has demonstrated behavior so contrary to the standards of the profession for which the student is preparing as to render him/her unfit for the profession. In such cases, disqualification will occur immediately upon notice to the student, which shall include an explanation of the basis for the action, and the campus may require the student to discontinue enrollment as of the date of the notification.

Students who have been disqualified from SDSU will not be allowed to attend regular, or Open University, or classes through SDSU Global Campus Special Sessions until one year from the date of their disqualification. Students must also reapply for admission to the university and gain acceptance before resuming enrollment in regular SDSU classes after that one year.

## Student-Athlete Satisfactory Academic Progress Requirement

In order to remain eligible for intercollegiate competition, a stu-dent-athlete must be enrolled in an academic program leading to a recognized degree, and must be making satisfactory progress toward that degree under the rules of the institution and the NCAA.

## Student Conduct

Inappropriate conduct by students or applicants for admission is subject to discipline on the San Diego State University campus. The Center for Student Rights and Responsibilities establishes standards and procedures in accordance with regulations contained in Sections 41301, 41302 of Title 5, California Code of Regulations. Procedures are set forth in CSU Executive Order 1098 (revised June 23, 2015), at http://calstate.edu/eo/EO-1098-rev-6-23-15.html. These sections are as follows:

## 41301. Standards for Student Conduct.

A. Campus Community Values

The university is committed to maintaining a safe and healthy living and learning environment for students, faculty, and staff. Each member of the campus community should choose behaviors that contribute toward this end. Students are expected to be good citizens and to engage in responsible behaviors that reflect well upon their university, to be civil to one another and to others in the campus community, and contribute positively to student and university life.
B. Grounds for Student Discipline

Student behavior that is not consistent with the Student Conduct Code is addressed through an educational process that is designed to promote safety and good citizenship and, when necessary, impose appropriate consequences.

The following are the grounds upon which student discipline can be based:

1. Dishonesty, including:
a. Cheating, plagiarism, or other forms of academic dishonesty that are intended to gain unfair academic advantage.
b. Furnishing false information to a university official, faculty member, or campus office.
c. Forgery, alteration, or misuse of a university document, key, or identification instrument.
d. Misrepresenting one's self to be an authorized agent of the university or one of its auxiliaries.
2. Unauthorized entry into, presence in, use of, or misuse of university property.
3. Willful, material and substantial disruption or obstruction of a university-related activity, or any on-campus activity.
4. Participating in an activity that substantially and materially disrupts the normal operations of the university, or infringes on the rights of members of the university community.
5. Willful, material and substantial obstruction of the free flow of pedestrian or other traffic, on or leading to campus property or an off-campus university related activity.
6. Disorderly, lewd, indecent, or obscene behavior at a university related activity, or directed toward a member of the university community.
7. Conduct that threatens or endangers the health or safety of any person within or related to the university community, including physical abuse, threats, intimidation, harassment, or sexual misconduct.
8. Hazing, or conspiracy to haze. Hazing is defined as any method of initiation or pre-initiation into a student organization or student body, whether or not the organization or body is officially recognized by an educational institution, which is likely to cause serious bodily injury to any former, current, or prospective student of any school, community college, college, university or other educational institution in this state (Penal Code 245.6), and in addition, any act likely to cause physical harm, personal degradation or disgrace resulting in physical or mental harm, to any former, current, or prospective student of any school, community college, college, university or other educational institution. The term "hazing" does not include customary athletic events or school sanctioned events.

Neither the express or implied consent of a victim of hazing, nor the lack of active participation in a particular hazing incident is a defense. Apathy or acquiescence in the presence of hazing is not a neutral act, and is also a violation of this section.
9. Use, possession, manufacture, or distribution of illegal drugs or drug-related paraphernalia, (except as expressly permitted by law and university regulations) or the misuse of legal pharmaceutical drugs. SDSU does not permit the possession or use of marijuana even with a medical recommendation.
10. Use, possession, manufacture, or distribution of alcoholic beverages (except as expressly permitted by law and university regulations), or public intoxication while on campus or at a university related activity.
11. Theft of property or services from the university community, or misappropriation of university resources.
12. Unauthorized destruction or damage to university property or other property in the university community.
13. Possession or misuse of firearms or guns, replicas, ammunition, explosives, fireworks, knives, other weapons, or dangerous chemicals (without the prior authorization of the university president) on campus or at a university related activity.
14. Unauthorized recording, dissemination, or publication of academic presentations (including handwritten notes) for a commercial purpose.
15. Misuse of computer facilities or resources, including:
a. Unauthorized entry into a file, for any purpose.
b. Unauthorized transfer of a file.
c. Use of another's identification or password.
d. Use of computing facilities, campus network, or other resources to interfere with the work of another member of the university community.
e. Use of computing facilities and resources to send obscene or intimidating and abusive messages.
f. Use of computing facilities and resources to interfere with normal university operations.
g. Use of computing facilities and resources in violation of copyright laws.
h. Violation of a campus computer use policy.
16. Violation of any published university policy, rule, regulation or presidential order.
17. Failure to comply with directions, or interference, with any university official or any public safety officer while acting in the performance of his/her duties.
18. Any act chargeable as a violation of a federal, state, or local law that poses a substantial threat to the safety or well-being of members of the university community, to property within the university community or poses a significant threat of disruption or interference with university operations.
19. Violation of the Student Conduct Procedures, including:
a. Falsification, distortion, or misrepresentation of information related to a student discipline matter.
b. Disruption or interference with the orderly progress of a student discipline proceeding.
c. Initiation of a student discipline proceeding in bad faith.
d. Attempting to discourage another from participating in the student discipline matter.
e. Attempting to influence the impartiality of any participant in a student discipline matter.
f. Verbal or physical harassment or intimidation of any participant in a student discipline matter.
g. Failure to comply with the sanction(s) imposed under a student discipline proceeding.
20. Encouraging, permitting, or assisting another to do any act that could subject him or her to discipline.

## C. Procedures for Enforcing This Code

The chancellor shall adopt procedures to ensure students are afforded appropriate notice and an opportunity to be heard before the university imposes any sanction for a violation of the Student Conduct Code. CSU Executive Order 1098 (revised June 23, 2015), at http://calstate.edu/eo/EO-1098-rev-6-23-15. html.
D. Application of This Code

Sanctions for the conduct listed above can be imposed on applicants, enrolled students, students between academic terms, graduates awaiting degrees, and students who withdraw from school while a disciplinary matter is pending. Conduct that threatens the safety or security of the campus community, or substantially disrupts the functions or operation of the university is within the jurisdiction of this Article regardless of whether it occurs on or off campus. Nothing in this Code may conflict with California Education Code Section 66301 that prohibits disciplinary action against students based on behavior protected by the First Amendment.

## 41302. Disposition of Fees: Campus Emergency; Interim Suspension.

The president of the campus may place on probation, suspend, or expel a student for one or more of the causes enumerated in Section 41301. No fees or tuition paid by or for such student for the semester, quarter, or summer session in which he or she is suspended or expelled shall be refunded. If the student is readmitted before the close of the semester, quarter, or summer session in which he or she is suspended, no additional tuition or fees shall be required of the student on account of the suspension.

During periods of campus emergency, as determined by the president of the individual campus, the president may, after consultation with the chancellor, place into immediate effect any emergency regulations, procedures, and other measures deemed necessary or appropriate to meet the emergency, safeguard persons and property, and maintain educational activities.

The president may immediately impose an interim suspension in all cases in which there is reasonable cause to believe that such an immediate suspension is required in order to protect lives or property and to insure the maintenance of order. A student so placed on interim suspension shall be given prompt notice of charges and the opportunity for a hearing within 10 days of the imposition of interim suspension. During the period of interim suspension, the student shall not, without prior written permission of the president or designated representative, enter any campus of the California State University other than to attend the hearing. Violation of any condition of interim suspension shall be grounds for expulsion.

## Student Grievances

If a student believes that a professor's treatment is grossly unfair or that a professor's behavior is clearly unprofessional, the student may bring the complaint to the proper university authorities and official reviewing bodies by following the Procedures for Handling Student Grievances Against Members of the Faculty, adopted by the Faculty Senate. A copy of the procedures may be obtained from the Office of the Student Ombudsman, Student Services East, Room 1105.

## Cheating and Plagiarism

Institutions of higher education are founded to impart knowledge, seek truth, and encourage one's development for the good of society. University students shall thus be intellectually and morally obliged to pursue studies with honesty and integrity. In preparing and submitting materials for academic courses and in taking examinations, a student shall not yield to cheating or plagiarism, which not only violate academic standards but also make the offender liable to penalties explicit in Section 41301 of Title 5, California Code of Regulations as follows:

Expulsion, Suspension, and Probation of Students. Following procedures consonant with due process established pursuant to Section 41304, any student of a campus may be expelled, suspended, placed on probation, or given a lesser sanction for one or more of the following causes that must be campus related.

## Cheating

Cheating is defined as the act of obtaining, or attempting to obtain, credit for academic work by the use of dishonest, deceptive, or fraudulent means. Examples of cheating include, but are not limited to:
a. copying, in part or in whole, from another's test or other examination;
b. discussing answers or ideas relating to the answers on a test or other examination without the permission of the instructor;
c. obtaining copies of a test, an examination, or other course material without the permission of the instructor;
d. using notes, cheat sheets, or other devices considered inappropriate under the prescribed testing condition;
e. collaborating with another or others in work to be presented without the permission of the instructor;
f. falsifying records, laboratory work, or other course data;
g. submitting work previously presented in another course, if contrary to the rules of the course;
h. altering or interfering with the grading procedures;
i. plagiarizing, as defined; and
j. knowingly and intentionally assisting another student in any of the above.

## Plagiarism

Plagiarism is defined as the act of incorporating ideas, words, or specific substance of another, whether purchased, borrowed, or otherwise obtained, and submitting same to the university as one's own work to fulfill academic requirements without giving credit to the appropriate source. Plagiarism shall include but not be limited to:
a. submitting work, either in part or in whole, completed by another;
b. omitting citations for ideas, statements, facts, or conclusions that belong to another;
c. omitting quotation marks when quoting directly from another, whether it be a paragraph, sentence, or part thereof;
d. close and lengthy paraphrasing of the writings of another;
e. submitting another person's artistic works, such as drawings, musical compositions, paintings, photographs, or sculptures; and
f. submitting as one's own work papers purchased from research companies.

## Disciplinary Action

Cheating and plagiarism in connection with an academic program at the university may warrant two separate and distinct courses of action that may be applied concurrently in response to a violation of this policy: (a) academic sanctions, such as grade modifications; and (b) disciplinary sanctions, such as probation, suspension, or expulsion.

Academic sanctions are concerned with the student's grades and are the responsibility of the instructor involved. Disciplinary sanctions are concerned with the student's records and status on campus and shall be the responsibility of the university president or designated representative. The Director of the Center for Student Rights and Responsibilities shall be the president's representative in matters of student discipline.

## Civil and Criminal Penalties for Violation of Federal Copyrights Law <br> Anyone who is found to be liable for copyright infringement

 may be liable for either the owner's actual damages, along with any profits of the infringer, or statutory damages of up to $\$ 30,000$ per work infringed. In the case of a willful infringement, a court may award up to $\$ 150,000$ per work infringed (see 17 U.S.C. §504). Courts also have discretion to award costs and attorneys' fees to the prevailing party (see 17 U.S.C. §505). Willful copyright infringement can also result in criminal penalties, including imprisonment and fines (see 17 U.S.C. §506 and 18 U.S.C. §2319).
## SDSU Alcohol and Substance Abuse Policies

> In accordance with the California Information Practices Act, the Vice President for Student Affairs or designee of San Diego State University may notify a student's parent(s) or legal guardian(s) in the event compelling circumstances exist affecting the student's health or safety, including circumstances involving alcohol or controlled substances.

This statement is presented to students to provide information about (1) health risks associated with alcohol and other drugs, (2) prevention and treatment programs available on campus, and (3) applicable State laws and campus policies.

## Risks

Use and abuse of alcohol and other drugs can lead to accidents, injury, and other medical emergencies. Alcohol, especially in high doses, or when combined with medications or illegal drugs continues to claim the lives of college students across the nation. If you see someone unconscious, call 9-1-1; doing so may save his or her life.

Driving after consumption of even relatively small quantities of alcohol can substantially increase your risk of crash involvement. Even after just a drink or two, drinkers may experience some loss of their ability to think about complex problems or accomplish complex tasks. Drinkers may also lose some control over impulsive behavior.

To become dependent upon chemicals such as alcohol and/or illicit drugs is to put your health and life at risk. Chemical dependency is a condition in which the use of mood altering substances, such as drugs or alcohol, affect any area of life on a continuing basis. Medical research has established very strong evidence that alcohol abuse contributes significantly to cancer and heart disease. Many illicit drugs have also been demonstrated to lead to serious short and long-term health problems. There is clear evidence of serious negative effects on babies due to use of illicit drugs and alcohol by the mother during pregnancy.

## Campus Resources

Keeping yourself informed is an important step in developing a healthy lifestyle and in knowing how to cope with problems as they arise. SDSU provides useful and informative prevention education programs throughout the year. A variety of departments sponsor workshops and lectures on alcohol and drug related issues to support and encourage healthy, productive lifestyles. These programs are available through: Counseling and Psychological Services, 619-594-5220; Residential Education Office,

619-594-5742; Well-being and Health Promotion, 619-594-4133; Athletic Department, 619-594-3019; Student Health Services, 619-594-5281; University Police Department, 619-594-1991.

For students with substance abuse problems or concerns, assistance is available at SDSU's Counseling and Psychological Services (CPS) located in Calpulli Center, Room 4401. Students who prefer an appointment with a health care provider (e.g. nurse or physician), may contact Student Health Services. If you are aware of problems with friends, roommates, or family members, we encourage you to act responsibly by consulting with Counseling and Psychological Services. Remaining silent or waiting until a situation has escalated is not responsible behavior. SDSU supports the notion of students helping one another to cooperatively solve alcohol and substance abuse problems as they occur.

## Laws and Campus Policy

With few exceptions, it is illegal for anyone under the age of 21 to purchase or possess alcohol. If you violate these laws, you may face a minimum fine of $\$ 250$ and suspension of your driving license. For more information about California laws, visit the California State Bar website at http://www.calbar.ca.gov/ Portals/O/documents/rfp/2013/2013_AttachA_Kids_Law_PCC. pdf or the California Alcohol Beverage Control website at https://www.abc.ca.gov/prevention/teens-and-alcohol/.

Federal and state laws define a number of substances as "drugs" with sanctions related to their manufacture, sale, possession, and use varying by type of substance and quantity. See California State Bar website at http://www.calbar.ca.gov/Public/ Free-Legal-Information/Legal-Guides/Kids-the-Law.

In addition to the Standards for Student Conduct in the California Code of Regulations, Title V, Article 2, Section 41301, SDSU's expectations of responsible student behavior prohibits the unlawful possession, use, or distribution of drugs and alcohol by students on university property or in surrounding neighborhoods, or as any part of the university's activities. Violators may face suspension or expulsion from the university. In addition, the university will cooperate with governmental authorities in criminal and civil actions. The university does not accept alcohol or substance abuse as an excuse, reason, or rationale for any act of abuse, harassment, intimidation, violence, or vandalism.

Possession or consumption of distilled liquor on university property is prohibited at all times. Possession, consumption, or sale of beer or wine by those 21 years of age or older is permitted at designated campus locations and events only with prior approval of the vice president for student affairs.

On campus property, and in surrounding neighborhoods, the sale, distribution, knowing possession, and use of dangerous drugs or narcotics are prohibited. Students are also forbidden by state and federal laws to sell, distribute, possess, or use those drugs. SDSU does not permit the possession or use of marijuana even with a medical recommendation.

Student organizations, residence halls, athletics, and Greek Life have instituted additional policies regarding alcohol and drugs. Please contact relevant administration offices for more information. More information can also be found at http://go.sdsu. edu/student_affairs/healthpromotion/aodalcoholandotherdrugs. aspx.

As a student at SDSU, you are responsible for your behavior and are fully accountable for your actions. Violation of this policy statement will not go unchallenged within the SDSU community. Any university student may be expelled, suspended, or placed on probation for violating university regulations regarding alcohol or drugs. Additionally, using alcohol or drugs negatively affects your academic performance.

Students who possess, use, or distribute substances such as, but not limited to, marijuana, cocaine, methamphetamines, or other hallucinogens and narcotics, or who violate statutes regarding alcoholic beverages, are subject to arrest, imprisonment, or a fine according to state law. The University Police Department is empowered to enforce all local and state laws, including public drunkenness, driving under the influence, and possession of alcohol by a minor.

The university's commitment to exercising disciplinary powers in cases of illegal alcohol and drug use complements its full measure of support for students who seek help for themselves or their acquaintances. These two approaches, combined with an active prevention education program, provide a strong basis for maintaining university expectations for a safe, healthy, and productive campus community. We hope that you will take advantage of the programs and services available to you, and that you will join with us in creating a viable learning community.

## Drug Law Violations and Consequences

A federal or state drug conviction for possession, sale, or conspiring to sell illegal drugs can affect a student's eligibility to receive federal student financial aid, including loans, grants, and work study. If the offense occurs while the student is receiving federal student financial aid, the student will lose aid eligibility for a certain period of time. Additional information is available from the Office of Financial Aid and Scholarships, Student Services West, Room 3615, 619-594-6323, or at http://www.sdsu.edu/ financialaid.

## SDSU Smoke-Free Policy

SDSU is a completely smoke-free campus. Smoking is not permitted in or outside any buildings, including Viejas Arena and auxiliary buildings, or in parking areas. Use of any tobacco product can result in an administrative citation.

This policy implements Section 42356 of Title 5, California Code of Regulations and CSU Memorandum, 2002-26 and 200319, in accordance with California Education Code Sections 89030 and 89031, California Government Code Sections 7596-7598, and CSU Executive Order 599.

Visit http://smokefree.sdsu.edu/smoke_free/ for more information on the SDSU smoking policy and smoking cessation programs.

## SDSU Active Transportation Policy (Bicycles and Skateboards on Campus)

SDSU encourages our community to use alternative modes of transportation to and from campus. Non-electric bicycles, skateboards, and scooters may only be operated on streets and designated paths. In other locations, bicyclists, skateboarders, and those riding scooters shall walk their devices and shall park them in designated parking stands and areas. Electric/motorized bicycles, skateboards, and scooters are not permitted to be used on campus. Use of bicycles or personal wheeled conveyances in areas other than designated areas is a violation of university policy, or the law, and can result in an administrative or criminal citation.

## Service and Guide Dog Policy

San Diego State University complies with the Americans with Disabilities Act Amendments Act of 2008 (ADAAA) and Section 504 of the Rehabilitation Act of 1973. The ADAAA and Section 504 require SDSU to make reasonable modifications to its policies, practices, or procedures to permit the use of a service or guide animal (further known as "dog") by a faculty, staff, student, or visitor (further known as handler) with a disability.

## Definition of a Service or Guide Dog

The ADAAA defines a service or guide animal as "any dog (or miniature horse) that is individually trained to do work or perform tasks for the benefit of an individual with a disability, including a physical, psychiatric, sensory, or other mental disability."

It is important to note that other species of animal, whether wild or domestic, trained or untrained, are not service animals for the purposes of the ADAAA. It should further be noted that the ADAAA provides an exception for miniature horses that are trained as guide animals for the blind or visually impaired. Note that the crime deterrent effects of a dog's presence and the provision of comfort, companionship, emotional support, or well-being do not constitute work or tasks for the purposes of determining whether a dog is a service or guide animal under the ADAAA or this policy.

## Verification of a Service or Guide Dog

Handlers will not be asked about the nature or extent of his or her disability. However, when it is not readily apparent that the dog identified by the handler is trained to do work or perform tasks for him or her, university designees may only ask the handler the following two questions:

- Is the dog required because of a disability?
-What work or task has the dog been trained to perform?
Documentation, such as proof that the dog has been certified, trained, or licensed as a service or guide dog is not required.

For complete service and guide dog policy, visit http://go.sdsu. edu/student_affairs/sds/serviceanimals.aspx.

## Safety and Security Report

In accordance with the requirements of the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, the San Diego State University Safety, Security and Fire Report and current annual crime statistics are available online at http://www.police.sdsu.edu. Call the University Police Community Resource Officer at 619-594-1447 for more information.

## Availability of Institutional and Financial Assistance Information

The following information concerning student financial assistance may be obtained from the Office of Financial Aid and Scholarships, Student Services West, Room 3615, 619-594-6323, or at http://www.sdsu.edu/financialaid:

1. A description of the federal, state, institutional, local, and private student financial assistance programs available to students who enroll at San Diego State University and for San Diego State University students participating in study abroad programs;
2. For each aid program, a description of procedures and forms by which students apply for assistance, student eligibility requirements, criteria for selecting recipients from the group of eligible applicants, and criteria for determining the amount of a student's award;
3. A description of the rights and responsibilities of students receiving financial assistance, including federal Title IV student assistance programs, criteria for continued student eligibility under each program, and how a drug law violation may affect your eligibility to receive financial aid;
4. The satisfactory academic progress standards that students must maintain for the purpose of receiving financial assistance and criteria by which a student who has failed to maintain satisfactory progress may reestablish eligibility for financial assistance;
5. The method by which financial assistance disbursements will be made to students and the frequency of those disbursements;
6. The way the university provides for Pell-eligible students to obtain or purchase required books and supplies by the seventh day of a payment period and how the student may opt out;
7. The terms of any loan received as part of the student's financial aid package, a sample loan repayment schedule, and the necessity for repaying loans;
8. The general conditions and terms applicable to any employment provided as part of the student's financial aid package;
9. The terms and conditions of the loans students receive under the Direct Loan and Perkins Loan Programs;
10. The exit counseling information the university provides and collects for student borrowers; and
11. Contact information for the Office of the Student Ombudsman office available for disputes concerning federal, institutional and private loans.
Information concerning the cost of attending San Diego State University is available from the Office of Financial Aid and Scholarships, Student Services West, Room 3615, 619-594-6323, or at http://www.sdsu.edu/financialaid, and includes tuition and fees; the estimated costs of books and supplies; estimates of typical student room, board, and transportation costs; and, if requested, additional costs for specific programs.

Information concerning the refund policies of San Diego State University for the return of unearned tuition and fees or other refundable portions of institutional charges is available from Student Account Services, Student Services West, Room 2536, 619-594-5253, or at http://www.sdsu.edu/sas.

Information concerning policies regarding the return of federal Title IV student assistance funds as required by regulation is available from Student Account Services, Student Services West, Room 2536, 619-594-5253, or at http://www.sdsu.edu/sas.

Information concerning loan exit counseling for all student borrowers under the federal student loan programs is available from Student Account Services, Student Services West, Room 2536, 619-594-5253, or at http://www.sdsu.edu/sas.

Information regarding special facilities and services available to students with disabilities may be obtained from the Student Ability Success Center, Calpulli Center, Room 3101, 619-594-6473 (TDD: 619-594-2929), or at http://www.sa.sdsu.edu/sds.

Information concerning San Diego State University policies, procedures, and facilities for students and others to report criminal actions or other emergencies occurring on campus may be obtained from the University Police Department, 619-594-1991, or at http://www.police.sdsu.edu.

Information concerning San Diego State University annual campus security report and annual fire safety report may be obtained from the University Police Department, 619-594-1991, or at http://www.police.sdsu.edu.

Information concerning the prevention of drug and alcohol abuse and rehabilitation programs may be obtained from Counseling and Psychological Services, Calpulli Center, Room 4401, 619-594-5220, or at http://www.sa.sdsu.edu/cps.

Information regarding student retention and graduation rates of students enrolled at San Diego State University and, if available, the number and percentage of students completing the program in which the student is enrolled or has expressed interest may be obtained from Analytic Studies and Institutional Research, Manchester Hall, Room 3310, 619-594-6846, or at http://asir.sdsu.edu.

Information concerning athletic opportunities available to male and female students and the financial resources and personnel that San Diego State University dedicates to its men's and women's teams may be obtained from the director of Intercollegiate Athletics, Aztec Athletics Center, Room 3015, 619-594-6357, or at http://www.goaztecs.com.

Information concerning teacher preparation programs at San Diego State University, including pass rate on teacher certification examinations, may be obtained from the Office of Advising and Recruitment, Education and Business Administration, Room 259, 619-594-6320.

Information concerning grievance procedures for students who feel aggrieved in their relationships with the university, its policies, practices and procedures, or its faculty and staff may be obtained from the Office of the Student Ombudsman, Student Services East, Room 1105, 619-594-6578, or at http://www. sa.sdsu.edu/ombuds.

Information concerning student activities that San Diego State University provides, must be easily accessible on http://www. sdsu.edu.

Information concerning student body diversity at San Diego State University, including the percentage of enrolled, full-time students who are (1) male, (2) female, (3) Pell Grant recipients, and (4) self-identified members of a specific racial or ethnic group, may be obtained from Analytic Studies and Institutional Research, Manchester Hall, Room 3310, 619-594-6846, or at http://asir.sdsu. edu.

The federal Military Selective Service Act (the "Act") requires most males residing in the United States to present themselves for registration with the Selective Service System within 30 days of their 18th birthday. Most males between the ages of 18 and 25 must be registered. Males born after December 31, 1959, may be required to submit a statement of compliance with the Act and regulations in order to receive any grant, loan, or work assistance under specified provisions of existing federal law. In California, students subject to the Act who fail to register are also ineligible to receive any need-based student grants funded by the state or a public postsecondary institution.

Selective Service registration forms are available at any U.S. Post Office, and many high schools have a staff member or teacher appointed as a Selective Service Registrar. Applicants for financial aid can also request that information provided on the Free Application for Federal Student Aid (FAFSA) be used to register them with the Selective Service. Information on the Selective Service System is available and the registration process may be initiated online at http://www.sss.gov.

## Student Complaint Procedure <br> (Complaints Regarding the CSU)

Office of the Student Ombudsman
Student Services East, Room 1105
619-594-6578
http://www.studentaffairs.sdsu.edu/ombuds
The California State University takes very seriously complaints and concerns regarding the institution. If you have a complaint regarding the CSU, you may present your complaint as follows:

1. If your complaint concerns CSU's compliance with academic program quality and accrediting standards, you may present your complaint to the Western Association of Schools and Colleges (WASC) at http://www.wascsenior.org/comments. WASC is the agency that accredits the CSU's academic program.
2. If your complaint concerns an alleged violation by CSU of any law that prohibits discrimination, harassment or retaliation based on a protected status (such as age, disability, gender (or sex), gender identity, gender expression, nationality, race or ethnicity (including color or ancestry), religion or veteran or military status), you may present your complaint as described in Section XVI (Nondiscrimination Policy).
3. If your complaint concerns an alleged violation by the CSU of other state law, including laws prohibiting fraud and false advertising, you may present your claim complaint to the campus president or Office of the Student Ombudsman, Student Services East, Room 1105, 619-594-6578, http://www.studentaffairs.sdsu.edu/ombuds. The president or student ombudsman will provide guidance on the appropriate campus process for addressing your particular issue. See Procedure for Student Complaints-CSU Executive Order 1063 for details regarding the complaint requirements and complaint process at http:// www.calstate.edu/eo/eo-1063.html.
4. Other complaints regarding the CSU may be presented to the campus dean of students, who will provide guidance on the appropriate campus process for addressing your particular issue.
If you believe that your complaint warrants further attention after you have exhausted all the steps outlined by the president or student ombudsman, or by WASC, you may file an appeal with the Assistant Vice Chancellor, Academic and Student Affairs at the CSU Chancellor's Office.

This procedure should not be construed to limit any right that you may have to take action to resolve your complaint.



## The California State University

Welcome to the California State University (CSU) - the nation's largest comprehensive university with 23 unique campuses serving approximately 482,000 students and employing more than 53,000 faculty and staff.

Each year, the university awards more than 127,000 degrees. CSU graduates are serving as leaders in the industries that drive California's economy, including business, agriculture, entertainment, engineering, teaching, hospitality, and healthcare. Learn more at https://www.calstate.edu.

## A Tradition of Excellence For More than Six Decades

Since 1961, the CSU has provided an affordable, accessible, and high-quality education to 3.8 million graduates throughout California. While each campus is unique based on its curricular specialties, location and campus culture, every CSU is distinguished for the quality of its educational programs. All campuses are fully accredited, provide a high-quality broad liberal educational program and offer opportunities for students to engage in campus life through the Associated Students, Inc., clubs and service learning. Through leading-edge programs, superior teaching and extensive workforce training opportunities, CSU students graduate with the critical thinking skills, industry knowledge and hands-on experience necessary for employment and career advancement.

## Facts

- Today, one of every 20 Americans with a college degree is a CSU graduate.
- One of every 10 employees in California is a CSU alumnus.
- The CSU awards about half of the bachelor's degrees earned in California.
- The CSU awards $41 \%$ of California's nursing degrees.
- The CSU is the leading provider of teacher preparation programs in the state.
- In 2018-19, the CSU awarded nearly 20,000 business degrees and more than 6,700 engineering degrees.
- The CSU offers more than 140 fully online and 120 hybrid degree programs and concentrations.
- The CSU offers over 4,750 online courses per term, providing more educational options to students who may prefer an online format to a traditional classroom setting.
- The CSU's online concurrent enrollment program gives students the ability to enroll in courses offered by other campuses in the CSU.
- Over a recent four year period, the CSU has issued nearly 50,000 professional development certificates in education, health services, business and technology, leisure and hospitality, manufacturing, international trade, and many other industries.
- CSU Centers for Community Engagement and Service Learning make available more than 3,100 service learning courses.
- More than 67,000 students participate in service-learning, contributing more than 1.1 million hours of service each year.
- For every $\$ 1$ that the state invests in the CSU, the university generates $\$ 5.43$ for California's economy.


## Governance

The CSU is governed by the Board of Trustees, most of whom are appointed by the governor and serve with faculty and student representatives. The CSU chancellor is the chief executive officer, reporting to the board. The campus presidents serve as the cam-pus-level chief executive officers. The trustees, chancellor, and presidents develop university-wide educational policy. The presidents, in consultation with the CSU Academic Senate and other campus stakeholder groups, render and implement local policy decisions.

## CSU Historical Milestones

The individual California State Colleges were established as a system with a Board of Trustees and a chancellor in 1960 by the Donahoe Higher Education Act. In 1972, the system was designated as the California State University and Colleges, and in 1982, the system became the California State University. Today, the CSU is comprised of 23 campuses, including comprehensive and polytechnic universities and, since July 1995, the California State University Maritime Academy, a specialized campus.

The oldest campus-San José State University-was founded in 1857 and became the first institution of public higher education in California. The newest-California State University Channel Islands—opened in fall 2002, with freshmen arriving in fall 2003.

In 1963, the CSU Academic Senate was established to act as the official voice of CSU faculty in university-wide matters. Also, the California State College Student Presidents Associationwhich was later renamed the California State Student Association, was founded to represent each campus student association on issues affecting students.

Through its many decades of service, the CSU has continued to adapt to address societal changes, student needs and workforce trends. While the CSU's core mission has always focused on providing high-quality, affordable bachelor's and master's degree programs, over time the university has added a wide range of services and programs to support student success - from adding health centers and special programs for veterans to building student residential facilities to provide a comprehensive educational experience.

To improve degree completion and accommodate students working full- or part-time, the educational paradigm was expanded to give students the ability to complete upper-division and graduate requirements through part-time, late afternoon and evening study. The university also expanded its programs to include a variety of teaching and school service credential programs, specially designed for working professionals.

In 2010, in an effort to accommodate community college transfer students, the CSU, in concert with the California Community Colleges (CCC), launched the Associate Degree for Transfer (ADT), which guarantees CCC transfer students with an ADT admission to the CSU with junior status. ADT has since proven to be the most effective path to a CSU for transfer students.

Always adapting to changes in technology and societal trends to support student learning and degree completion, the CSU launched CourseMatch, which enables CSU students to complete online courses at other CSU campuses, expanding enrollment opportunities and providing more educational opportunities for students who may prefer an online format to a traditional classroom setting.

The CSU marked a significant educational milestone when it broadened its degree offerings to include doctoral degrees. The CSU independently offers Doctor of Education (Ed.D.), Doctor of Physical Therapy (DPT), Doctor of Audiology (AuD) and Doctor of Nursing Practice (DNP) degree programs. Additionally, the CSU was recently authorized to offer the independent Doctor of Occupational Therapy (OTD). A limited number of other doctoral degrees are offered jointly with the University of California and private institutions in California.

The CSU strives to continually develop innovative programs, services and opportunities that will give students the tools they need to meet their full potential. In 2016, the university launched Graduation Initiative 2025, a bold plan to support students, increase the number of California's graduates earning high-quality degrees and eliminate achievement and equity gaps for all students. Through this initiative, the CSU is ensuring that all students have the opportunity to graduate according to their personal goals, positively impacting their lives, families and communities.

By providing an accessible, hands-on education that prepares graduates for career success, the CSU has created a network of alumni that is so extensive and renowned that it spans across the globe. As of 2019-20, more than 3.8 million CSU alumni are making a difference in the lives of the people of California and the world.

## Average Support Cost Per Full-time Equivalent Student and Sources of Funds

The total support cost per full-time equivalent student (FTES) includes the expenditures for current operations, including payments made to students in the form of financial aid, and all fully reimbursed programs contained in state appropriations. The average support cost is determined by dividing the total cost by the number of FTES. The total CSU 2019-20 budget amounts were $\$ 3,982,552,000$ from state General Fund (GF) appropriations and before adding $\$ 39.3$ million CaIPERS retirement adjustment, $\$ 2,499,138,000$ from gross tuition revenue and $\$ 656,748,000$ from other fee revenues for a total of \$7,138,439,000. The 2019-20 resident FTES target is 374,131 and the nonresident FTES based on past-year actual is 24,026 for a total of 398,157 FTES. The GF appropriation is applicable to resident students only whereas fee revenues are collected from resident and nonresident students. FTES is determined by dividing the total academic student load (e.g. 15 units per semester) (the figure used here to define a fulltime student's academic load).

The 2019-20 average support cost per FTES based on GF appropriation and net tuition fee revenue only is $\$ 16,922$ and when including all three sources as indicated below is $\$ 18,571$, which includes all fee revenue (e.g. tuition fees, application fees, and other campus mandatory fees) in the CSU Operating Fund. Of this amount, the average net tuition and other fee revenue per FTES is $\$ 7,926$.

The average CSU 2019-20 academic year, resident, undergraduate student basic tuition and other mandatory fees required to apply to, enroll in, or attend the university is $\$ 7,337$ ( $\$ 5,742$ tuition fee plus $\$ 1,595$ average campus-based fees). However, the costs paid by individual students will vary depending on campus, program, and whether a student is part-time, full-time, resident, or nonresident.

| 2019-2020 | Amount | Average cost <br> per FTES | Percentage |
| :--- | :--- | :--- | :--- |
| State Appropriation (GF) | $\$ 3,982,552,000$ | $\$ 10,645$ | $57.3 \%$ |
| Gross Tuition Revenue $^{\mathbf{2}}$ | $\$ 2,499,138,000$ | $\$ 6,277$ | $33.8 \%$ |
| Other Fees Revenue $\mathbf{2}$ | $\$ 656,748,000$ | $\$ 1,649$ | $8.9 \%$ |
| Total Support Cost | $\$ 7,138,439,000$ | $\$ 18,571$ | $100 \%$ |

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## Trustees of The California State University

Ex Officio Trustees
The Honorable Gavin Newsom Governor of California
The Honorable Eleni Kounalakis Lieutenant Governor of California

The Honorable Anthony Rendon Speaker of the Assembly
The Honorable Tony Thurmond
State Superintendent of Public Instruction
Dr. Timothy P. White
Chancellor of The California State University
Officers of the Trustees
The Honorable Gavin Newsom
President
Mr. Adam Day
Chair
Ms. Lillian Kimbell Vice Chair

Mr. Andrew Jones Secretary
Mr. Steve Relyea Treasurer

## Appointed Trustees

Appointments are for a term of eight years, except student, alumni, and faculty trustees whose terms are for two years. Terms expire in the year in parentheses. Names are listed alphabetically.

| Larry L. Adamson (2020) | Maryana Khames (2021) |
| :--- | :--- |
| Silas Abrego (2021) | Lillian Kimbell (2024) |
| Jane W. Carney (2022) | Jeffrey Krinsk (2027) |
| Adam Day (2023) | John "Jack" McGrory (2023) |
| Rebecca D. Eisen (2020) | Hugo N. Morales (2020) |
| Douglas Faigin (2025) | Romey Sabalius (2019) |
| Debra S. Farar (2022) | Lateefah Simon (2019) |
| Jean P. Firstenberg (2018) | Christopher J. Steinhauser (2026) |
| Wendy Fong (2024) | Peter J. Taylor (2021) |
| Juan Garcia (2020) |  |

## Correspondence with Trustees should be sent to:

## c/o Trustees Secretariat

The California State University
401 Golden Shore
Long Beach, CA 90802-4210

## Office of the Chancellor

The California State University
401 Golden Shore
Long Beach, CA 90802-4210
Telephone: 562-951-4000
Dr. Timothy P. White................................................................Chancellor
Mr. Steve Relyea ................................. Executive Vice Chancellor and Chief Financial Officer
Dr. Loren J. Blanchard..............................Executive Vice Chancellor, Academic and Student Affairs

Mr. Andrew Jones ......................................Executive Vice Chancellor, General Counsel
Mr. Garrett P. Ashley .................................Vice Chancellor, University Relations and Advancement

Ms. Evelyn Nazario $\qquad$ Vice Chancellor, Human Resources

Mr. Larry Mandel $\qquad$ Vice Chancellor and Chief University Auditor

## Campuses-The California State University

California State University, Bakersfield
9001 Stockdale Highway, Bakersfield, CA 93311-1022
Dr. Lynnette Zelezny, President
661-654-2782 • http://www.csub.edu
California State University, Channel Islands
One University Drive, Camarillo, CA 93012
Dr. Erika D. Beck, President
805-437-8400 • http://www.csuci.edu
California State University, Chico
400 West First Street, Chico, CA 95929
Dr. Gayle E. Hutchinson, President
530-898-4636 • http://www.csuchico.edu
California State University, Dominguez Hills
1000 East Victoria Street, Carson, CA 90747
Dr. Thomas A. Parham, President
310-243-3696 • http://www.csudh.edu
California State University, East Bay
25800 Carlos Bee Boulevard, Hayward, CA 94542
Dr. Leroy M. Morishita, President
510-885-3000 • http://www.csueastbay.edu
California State University, Fresno
5241 North Maple Avenue, Fresno, CA 93740
Dr. Joseph I. Castro, President
559-278-4240 • http://www.csufresno.edu
California State University, Fullerton
800 N. State College Boulevard, Fullerton, CA 92831-3599
Mr. Framroze Virjee, President
657-278-2011 • http://www.fullerton.edu
Humboldt State University
1 Harpst Street, Arcata, CA 95521-8299
Dr. Tom Jackson, Jr., President
707-826-3011 • http://www.humboldt.edu
California State University, Long Beach
1250 Bellflower Boulevard, Long Beach, CA 90840-0115
Dr. Jane Close Conoley, President
562-985-4111 • http://www.csulb.edu
California State University, Los Angeles
5151 State University Drive, Los Angeles, CA 90032
Dr. William A. Covino, President
323-343-3000 • http://www.calstatela.edu
California State University, Maritime Academy 200 Maritime Academy Drive, Vallejo, CA 94590 Rear Admiral Thomas A. Cropper, President 707-654-1000 • http://www.csum.edu

California State University, Monterey Bay 100 Campus Center, Seaside, CA 93955-8001
Dr. Eduardo M. Ochoa, President
831-582-3000 • http://www.csumb.edu
California State University, Northridge 18111 Nordhoff Street, Northridge, CA 91330
Dr. Dianne F. Harrison, President
818-677-1200 • http://www.csun.edu
California State Polytechnic University, Pomona 3801 West Temple Avenue, Pomona, CA 91768 Dr. Soraya M. Coley, President 909-869-7659 • http://www.cpp.edu
California State University, Sacramento 6000 J Street, Sacramento, CA 95819 Dr. Robert S. Nelsen, President 916-278-6011 • http://www.csus.edu
California State University, San Bernardino 5500 University Parkway, San Bernardino, CA 92407-2318 Dr. Tomás D. Morales, President
909-537-5000 • http://www.csusb.edu

## San Diego State University

5500 Campanile Drive, San Diego, CA 92182
Dr. Adela de la Torre, President
619-594-5200 • http://www.sdsu.edu

## SDSU Imperial Valley

720 Heber Avenue, Calexico, CA 92231
760-768-5500 • http://www.ivcampus.sdsu.edu

## San Francisco State University

1600 Holloway Avenue, San Francisco, CA 94132
Dr. Lynn Mahoney, President
415-338-1111 • http://www.sfsu.edu

## San José State University

One Washington Square, San José, CA 95192-0001
Dr. Mary A. Papazian, President
408-924-1000 • http://www.sjsu.edu
California Polytechnic State University, San Luis Obispo
One Grand Avenue, San Luis Obispo, CA 93407
Dr. Jeffrey D. Armstrong, President
805-756-1111 • http://www.calpoly.edu

## California State University, San Marcos

333 South Twin Oaks Valley Road, San Marcos, CA 92096-0001
Dr. Ellen J. Neufeldt, President
760-750-4000 • http://www.csusm.edu

## Sonoma State University

1801 East Cotati Avenue, Rohnert Park, CA 94928
Dr. Judy K. Sakaki, President
707-664-2880 • http://www.sonoma.edu
California State University, Stanislaus
One University Circle, Turlock, CA 95382
Dr. Ellen N. Junn, President
209-667-3122 • http://www.csustan.edu

## in this section:

» Tenured, Tenured-Track Faculty, and Administration
» Emeritus Faculty
» Lecturers
» Adjunct Faculty

# 2019-2020 Tenured, Tenured-Track Faculty, and Administration 

## de la Torre, Adela (2018)

$\qquad$ ..President B.S., M.S., Ph.D., University of California, Berkeley.

Abarbanell, Linda B. (2014).

$\qquad$ .. Assistant Professor of Psychology, SDSU Imperial Valley B.A., University of Illinois at Urbana-Champaign; M.S., Hunter College; Ed.D., Harvard University.
Abdel-Nour, Farid (2000). $\qquad$ ..Professor of Political Science B.S., Ph.D., Rutgers, The State University of New Jersey.

Abdel-Samad, Mounah (2010)..
Associate Professor of Public Affairs B.A., M.A., American University of Beirut; Ph.D., University of Albany.

Abhari, Kaveh (2017).........Assistant Professor of Management Information Systems B.S., University of Mazandaran, Iran; M.S., University of Tabriz, Iran; Ph.D., University of Hawaii.
Abman, Ryan (2015)...
...Assistant Professor of Economics B.S., University of Colorado at Boulder; M.A., Ph.D., University of California, Santa Barbara.
Abraham, John (2015). $\qquad$ ...Professor of Mechanical Engineering B. Tech., Indian Institute of Technology, India; M.A., Ph. D., Princeton University.

Adams, Brian E. (2003). $\qquad$ ...Professor of Political Science B.A., University of Southern California; M.A., Ph.D., University of California, Irvine.

Ahsan, Mujtaba (2013)...
.Associate Professor of Management B.E., Bangalore University, India; M.B.A., Indiana University; Ph.D., University of Wisconsin, Milwaukee.
Aitken, Stuart C. (1986)......................................The June Burnett Chair in Children's and Family Geographies; Albert W. Johnson Distinguished Professor of Geography B.Sc., Glasgow University; M.A., Miami University; Ph.D., University of Western Ontario.
Akhavian, Reza (2019)
...Assistant Professor of Civil, Construction, and Environmental Engineering B.S., University of Tehran, Iran; M.S., Ph.D., University of Central Florida.

Aksanli, Baris (2016)..
Assistant Professor of Electrical and Computer Engineering B.S., Bogazici University, Turkey; M.S., Ph.D., University of California, San Diego. Alameen-Shavers, Antwanisha V. (2013).

Assistant Professor of Africana Studies B.A., San Diego State University; M.A., The Ohio State University; Ph.D., Temple University.
Alamillo Olivas, Rosalva A. (2019).
Assistant Professor of Spanish and Portuguese B.A., Universidad Autonoma de Chihuahua, Mexico; M.A., New Mexico State University; Ph.D., University of Houston.
Alcaraz, John E. (1993)... $\qquad$ Associate Professor of Public Health B.A., M.A., Ph.D., University of California, San Diego.

Alcosser, Sandra B. (1986).............................................................. Professor of English B.A., Purdue University; M.F.A., University of Montana.

Alexseev, Mikhail A. (2000).. $\qquad$ ......Professor of Political Science B.A., M.A., Kiev State University; Ph.D., University of Washington.

Alfaro, Cristina M. (2004). $\qquad$ .. Interim Associate Vice President, Academic Affairs, SDSU International Affairs; Professor of Dual Language and English Learner Education B.A., M.A., San Diego State University; Ph.D., San Diego State University and Claremont Graduate University.
Alita, Adrian D. (2011)............... Associate Professor of Theatre, Television, and Film B.A., San Diego State University; M.F.A., University of California, Irvine.

Alkebulan, Adisa A. (2002).........................Associate Professor of Africana Studies B.A., Kent State University; M.A., Ph.D., Temple University.

Alonso, Lluliana (2019). $\qquad$ ...Assistant Professor of Teacher Education, SDSU Imperial Valley B.A., M.A., Ph.D., University of California, Los Angeles.

Altamirano, Magdalena (2006)..
Associate Professor of Spanish, SDSU Imperial Valley B.A., Universidad Nacional Autonoma de Mexico; M.A., Ph.D., El Colegio de Mexico.
Alter, Joseph W. (2005) $\qquad$ ...Associate Professor of Dance B.A., Hunter College; M.F.A., The Ohio State University.

Alvarado, Elizabeth R. (1974).. $\qquad$ Counselor, Educational Opportunity and Ethnic Affairs A.B., California State University, Northridge; M.S., San Diego State University.

Alimohammad, Amirhossein (2011).

$\qquad$ Associate Professor of Electrical and Computer Engineering M.Sc., University of Tehran; Ph.D., University of Alberta.

Alves, Thais da Costa (2009)... $\qquad$ ...The Associated General Contractors (AGC) Paul S. Roel Chair in Construction Engineering and Management; Associate Professor of Civil, Construction, and Environmental Engineering B.S., M.S., Federal University of Rio Grande do Norte, Brazil; Ph.D., University of California, Berkeley.
Amir, Nader (2006).. $\qquad$ ....Professor of Psychology B.A., B.S., University of Illinois at Urbana-Champaign; M.S... Ph.D.............................. Herman M. Finch University of Health Sciences/The Chicago Medical School.

An, Li (2005). $\qquad$ ..Professor of Geography B. S., Beijing University, China; M.S., Chinese Academy of Sciences, China; Ph.D., Michigan State University.
Anderson, John C. (2001)..
...Professor of Accountancy B.B.A., M.S., University of Missouri; Ph.D., University of Tennessee.

Anderson, Matthew E. (2000)... ... Associate Professor of Physics [Senate Distinguished Professor] B.S., University of California, San Diego; Ph.D., University of Oregon.

Anderson, Todd W. (1999)...
....Professor of Biology B.S., M.A., California State University, Fresno; Ph.D., University of California, Santa Barbara.
Appleyard, Bruce S. (2013). $\qquad$ ...Associate Professor of Public Affairs B.A., M.C.P., Ph.D., University of California, Berkeley.

Aquino-Sterling, Cristian R. (2011)........Associate Dean, Diversity and International Affairs, College of Education; Associate Professor of Teacher Education B.A., Fordham University; M.A. Columbia University; Ph.D. Arizona State University.
Arceneaux, Ronald J. (2007)... $\qquad$ ...Professor of Journalism and Media Studies A.B. J., University of Georgia; M.A., City University of New York; Ph.D., University of Georgia.
Ares-Lopez, Daniel (2017). $\qquad$ .Assistant Professor of Spanish B.A., Universidade de Santiago, Spain; M.A., University of Kansas.

Arredondo, Elva M. (2008). $\qquad$ Professor of Public Health B.S., University of Washington; M.A., Ph.D., Duke University.

Ashrafi, Ashkan (2007)... $\qquad$ Associate Professor of Electrical and Computer Engineering B.Sc., M.Sc., K.N., University of Technology, Tehran, Iran; M.S.E., Ph.D., University of Alabama, Huntsville.
Asselin, Pierre (2017) $\qquad$ .. The Dwight E. Stanford Chair in American Foreign Relations; Professor of History B.A., York University, Canada; M.A., University of Toronto, Canada; Ph.D., University of Hawaii.
Atkins, Catherine J. (1988)................ Associate Dean, Academic and Faculty Affairs, College of Sciences; Professor of Psychology A.B., M.S., San Diego State University; Ph.D., University of California, Riverside.

Atterton, Peter C. (2005) $\qquad$ .... Professor of Philosophy B.A., M.A., Ph.D., University of Essex.

Ayala, Guadalupe X. (2005)... $\qquad$ ..Professor of Public Health B.A., University of San Diego; M.P.H., San Diego State University; Ph.D., San Diego State University and University of California, San Diego.
Aziz, Andrew I. (2016).. $\qquad$ ..Associate Professor of Music and Dance B.A., Brown University; M.A., Ph.D., University of Rochester.

Badrinath, Swaminathan G. (2000) $\qquad$ .Professor of Finance B.A., M.A., University of Delhi, India; M.B.A., Indian Institute of Management, India; Ph.D., Purdue University.
Baek, Jong-Deuk (2008). $\qquad$ .. Associate Professor of Public Health B.A., M.B.A., Kyung Hee University, South Korea; Ph.D., University of South Carolina.
Bailey, Barbara Ann (2006)..
. Associate Professor of Statistics B.S., Springfield College in Illinois; M.S., University of Illinois at UrbanaChampaign; Ph. D., North Carolina State University.
Bailey, Quentin J. (2006)..
Associate Professor of English and Comparative Literature B.A., University of Cape Town, South Africa; M.A., University of Oklahoma; Ph.D., University of Oxford, United Kingdom.
Baker, Andrew M. (2011)... $\qquad$ ... Associate Professor of Marketing B.S., M.B.A., Oakland University; Ph.D., Georgia State University.

Baljon, Arlette R.C. (1999). $\qquad$ Associate Professor of Physics M.S., University of Utrecht, Netherlands; Ph.D., University of Chicago.

Balsdon, Edmund M. (2000).......................Associate Dean, Graduate and Research Affairs; Associate Professor of Economics B.A., College of the Holy Cross; M.A., Ph.D., University of California, Santa Barbara.

Bani Younes, Ahmad (2017)............... Assistant Professor of Aerospace Engineering B.S., Jordan University of Science and Technology, Jordan; M.S., University of Dayton; Ph.D., Texas A\&M University.
Barber, Larrisa K. (2018)..............................................Assistant Professor of Psychology B.A., University of Missouri, St. Louis; Ph.D., St. Louis University.

Barber, Nicholas A. (2018).. $\qquad$ .. Assistant Professor of Biology B.S., St. Louis University; Ph.D., University of Missouri.

Barbone, Steven L. (1997) $\qquad$ .Associate Professor of Philosophy B.S., University of Scranton; Ph.D., Marquette University.

Barlow, Jessica A. (1997) ...Professor of Speech, Language, and Hearing Sciences B.A., M.A., Ph.D., Indiana University.

Bartel, Rebecca C. (2016).................................Assistant Professor of Religious Studies B.A., Canadian Mennonite University, Canada; M.A., Universidad de los Andes, Columbia; Ph.D., University of Toronto, Canada.
Baweja, Harsimran S. (2014) $\qquad$ Associate Professor of Exercise and Nutritional Sciences B.P.T., Sardar Patel University, India; Ph.D., University of Florida.

Bayasi, Mohamad Ziad (1990).
..Professor of Civil, Construction, and Environmental Engineering B.S., Damascus University, Syria; M.S., South Dakota State University; M.S., Ph.D., Michigan State University. Registered Professional Engineer.

Beach, Wayne A. (1984). $\qquad$ .Professor of Communication B.A., Drake University; M.A., University of Montana; Ph.D., University of Utah.

Beasley, Edward J. (2006)......................................................................Professor of History B.A., M.A., Ph.D., University of California, San Diego.

Beck, Audrey N. (2015)....................................................Assistant Professor of Sociology B.A., University of California, Los Angeles; M.A., Ph.D., Duke University.

Beck, Lawrence A. (1982, except F'85-S'86)......Professor of Hospitality and Tourism Management B.S., Humboldt State University; M.A., Azusa Pacific University; Ph.D., University of Minnesota.

Bedau, Danielle J. (2006)........ Associate Professor of Theatre, Television, and Film B.F.A., California Institute of the Arts; M.F.A., University of California, Irvine.

Bekins, Linn K. (1999)..................Associate Professor of Rhetoric and Writing Studies B.A., University of San Diego; M.A., University of British Columbia, Canada; Ph.D., University of Utah.
Belch, George E. (1980)............Senior Associate Dean, Fowler College of Business; Professor of Marketing B.S., The Pennsylvania State University; M.S., University of Colorado; Ph.D., University of California, Los Angeles.
Ben, Pablo E. (2011).... $\qquad$ .. Associate Professor of History Lic., Universidad de Buenos Aires, Argentina; M.A., Ph.D., University of Chicago.
Benaglia, Cecilia (2018)... .. Assistant Professor of French and Italian B.A., Universita Ca Foscari, Italy; M.A., Universite Paris, France; Ph.D., Johns Hopkins University.
Bercaw, Lynne A. (2018)... $\qquad$ ..Professor of Teacher Education B.A., Boston College; M.Ed., Ed.D., Vanderbilt University.

Bergdahl, B. Mikael (1999).......Associate Professor of Chemistry and Biochemistry B.S., M.S., Ph.D., Chalmers University of Technology, Sweden.

Bernerth, Jeremy B. (2016) ... $\qquad$ ... Associate Professor of Management B.A., University of Georgia; M.S., Ph.D., Auburn University.

Beverinotti, Matias E. (2017).. $\qquad$ Assistant Professor of Spanish B.A., Universidad de Buenos Aires, Argentina; M.A., University of Kansas; Ph.D., University of Michigan.
Beyene, Asfaw (2003).. $\qquad$ .Professor of Mechanical Engineering M.S., Ph.D., Warsaw University of Technology, Poland.

Bhalla, Amneet Pal S. (2018)............ Assistant Professor of Mechanical Engineering B.Tech., M. Tech., Indian Institute of Technology, India; Ph.D., Northwestern University.
Bhattacharjee, Subrata (1991).. $\qquad$ .Professor of Mechanical Engineering B.Tech., Indian Institute of Technology, India; M.S., Ph.D., Washington State University.
Bhutani, Surabhi (2018).. $\qquad$ Assistant Professor of Exercise and Nutritional Sciences B.S., M.S., University of Delhi, India; Ph.D., University of Illinois, Chicago.

Biggs, Trent W. (2007).. $\qquad$ ....Professor of Geography A.B., Princeton University; M.A., Ph.D., University of California, Santa Barbara.

Black, Felicia (2018).................. Assistant Professor of Child and Family Development B.S., Cleveland State University; M.Ed., Ph.D., Kent State University.

Blashill, Aaron J. (2015)... $\qquad$ ....Associate Professor of Psychology B.S., Central Michigan University; M.S., Ph.D., Saint Louis University.

Bliss, Laurel (2007). $\qquad$ ..Associate Librarian B.A., Haverford College; M.A., University of Virginia; M.L.S., Southern Connecticut State University.
Bliznakova, Denitsa D. (2008) ....................Professor of Theatre, Television, and Film B.F.A., Parsons School of Design, Paris, France; M.F.A., Brandeis University, Boston.
Blomgren, Peter V. (2002).
. Professor of Mathematics M.Sc., The Royal Institute of Technology, Stockholm, Sweden; Ph.D., University of California, Los Angeles.
Blum, Edward J. (2007)... $\qquad$ ...Professor of History B.A., University of Michigan; M.A., Ph.D., University of Kentucky.

Blumenfeld, Henrike K. (2008)................Associate Professor of Speech, Language, and Hearing Sciences B.A., Bryn Mawr College; Ph.D., Northwestern University.

Bober-Michel, Marcie J. (1994, except F'95-S'96).........Professor of Learning Design and Technology B.A., University of Oregon; M.A., San Diego State University; Ph.D., Arizona State University.
Bohonak, Andrew J. (2000) .................Assistant Dean, Student Services, Policy and Curriculum, Graduate and Research Affairs; Professor of Biology B.S., Allegheny College; Ph.D., Cornell University.

Boime, Eric I. (2005)...................Associate Professor of History, SDSU Imperial Valley B.A., University of California, Santa Barbara; M.A., Ph.D., University of California, San Diego.
Bordelon, Suzanne M. (2002).. $\qquad$ .. Professor of Rhetoric and Writing Studies B.A., University of Washington; M.A., California State University, Chico; Ph.D., University of Oregon.
Borgstrom, Michael K. (2004).. $\qquad$ .. Associate Professor of English B.A., Santa Clara University; M.A., San Jose State University; Ph.D., University of California, Davis.
Bosco, Fernando J. (2002).. $\qquad$ ..Professor of Geography B.A., Wittenberg University; M.A., Ph.D., The Ohio State University.

Bowers, Janet Sue (1996)... $\qquad$ Associate Professor of Mathematics B.A., Bucknell University; M.A., Villanova University; Ph.D., Vanderbilt University.

Boyd, Richard B. (1996)..............Associate Professor of Rhetoric and Writing Studies B.A., University of San Diego; Ph.D., University of California, San Diego.

Braje, Todd J. (2011).. $\qquad$ Professor of Anthropology B.A., Beloit College; M.A. University of Florida; Ph.D., University of Oregon.

Branch, Andre J. (1999).. $\qquad$ Associate Professor of Teacher Education B.A., King's College; M.Ed., North Carolina State University; Ph.D., University of Washington.
Brandon, Regina R. (2006)... $\qquad$ ...Associate Professor of Special Education B.S., Virginia Union University; M.A., Ph.D., University of Nevada, Las Vegas.

Brasser, Susan M. (2006)... $\qquad$ ...Associate Professor of Psychology B.A., Coe College; Ph.D., State University of New York at Binghamton.

Bresciani Ludvik, Marilee J. (2006)....... Professor of Administration, Rehabilitation and Postsecondary Education B.A., M.A., Hastings College; Ph.D., University of Nebraska, Lincoln.

Briggs, Robert O. (2011).......................Professor of Management Information Systems B.S., M.B.A., San Diego State University; Ph.D., University of Arizona.

Brincks, Stephen (2019). $\qquad$ .Assistant Professor of Finance B.S., M.S., Georgia Institute of Technology.

Brooks, Joanna M. (2006)... $\qquad$ . Associate Vice President, Academic Affairs, Facullty Advancement; Professor of English and Comparative Literature B.A., Brigham Young University; M.A., Ph.D., University of California, Los Angeles.
Brooks, Richard D. (1995)... $\qquad$ .. Lecturer in Marketing B.S., M.B.A., San Diego State University.

Brotebeck, Stephen M. (2015). $\qquad$ .....Associate Professor of Theatre, Television, and Film B.F.A. Western Michigan University; M.F.A., The Pennsylvania State University.

Brown, Timothy C. (2018)... $\qquad$ ...Assistant Professor of Sociology B.A., M.A., Ph.D., Louisiana State University.

Brum, Christopher (2016)...............................Assistant Professor of Special Education B.S., Northeastern University; M.Ed., Ph.D., Boston College.

Buckley, Ann M. (2019).... $\qquad$ .Professor of Art and Design B.A., University of California, Berkeley; M.F.A., Otis College of Art and Design.

Buono, Michael J. (1982).. $\qquad$ .. Professor of Exercise and
Nutritional Sciences and Biology B.S., East Stroudsberg State College; M.S., University of Nevada; Ph.D., University of Arizona.

Burns, Kevin (1998). $\qquad$ .Professor of Biology B.S., Texas A\&M University; M.S., Louisiana State University; Ph.D., University of California, Berkeley.
Butler-Byrd, Nola M. (2004) $\qquad$ Associate Professor of Counseling and School Psychology B.A., Wesleyan University; M.A., San Diego State University; Ph.D., San Diego State University and Claremont Graduate University.
Calzo, Jerel P. (2016). $\qquad$ Associate Professor of Public Health B.A., University of California, Los Angeles; M.A., Ph.D. University of Michigan.

Camacho, Joaquin (2016)................Assistant Professor of Mechanical Engineering B.S., University of California, San Diego; Ph.D., University of California, Los Angeles.
Camargo, Esperanza (2015) $\qquad$ Assistant Professor of Public Affairs, SDSU Imperial Valley B.A., Universidad Incca de Colombia, Colombia; M.S., Ph.D., University of Nebraska at Omaha.
Canary, Heather E. (2017) $\qquad$ Professor of Communication B.A., Seattle Pacific University; M.A., California State University, Fullerton; Ph.D., Arizona State University.
Cannon, Daniel T. (2014). $\qquad$ .. Associate Professor of Exercise and Nutritional Sciences B.S., M.S., San Diego State University; Ph.D., University of Leeds.

Cappello, Marva G. (2000). $\qquad$ ...Professor of Teacher Education B.F.A., Rochester Institute of Technology; M.S.,., The City University of New York, Hunter College; Ph.D., University of Southern California.
Carlson, Beverly A. (2014)... $\qquad$ .. Assistant Professor of Nursing B.S.N., California State University, Dominguez Hills; M.S., San Diego State University; Ph.D., University of Nebraska.
Carretero, Ricardo (2002)... $\qquad$ .. Professor of Mathematics B.Sc., Universidad Nacional de Mexico, Mexico; Ph.D., University of London.

Casper, Monica J. (2020)... $\qquad$ .. Dean, College of Arts and Letters B.A., University of Chicago; Ph.D., University of California, San Fransisco.

Carruthers, David V. (1995).......................................................... B.A., Southern Oregon University; M.A., Ph.D., University of Oregon.

Castañeda, Donna M. (1993).............Professor of Psychology, SDSU Imperial Valley B.A., University of Washington; M.A., Ph.D., University of California, Davis.

Castillo, José E. (1987).. $\qquad$ ... Professor of Mathematics B.S., Universidad Central de Venezuela, Venezuela; M.A., University of Texas at Austin; Ph.D., University of New Mexico.
Castro, lana A. (2011).. $\qquad$ ...Associate Professor of Marketing B.A., University of Central Florida; M.B.A., Purdue University; Ph.D., Arizona State University.
Castro Arias, Carlos A. (2014). $\qquad$ . Assistant Professor of Art and Design B.F.A., Jorge Tadeo Lozano University, Colombia; M.F.A., San Francisco Art Institute.
Castro, Janet C. (1996). $\qquad$ Associate Director, Student Health Services, Student Affairs B.S., University of Kentucky; M.S., Miami University.

Cayleff, Susan E. (1987)
.....Professor of Women's Studies
[Senate Distinguished Professor] B.A., University of Massachusetts at Amherst; M.A., Sarah Lawrence College; M.A., Ph.D., Brown University.

Chakravarty, Dwarkaprasad (2018) ..................Assistant Professor of Management M.S., University of Wyoming; M.B.A., Indian Institute of Management, India.

Champion, Laurie (1999). $\qquad$ .Professor of English B.A., M.A., University of Texas; M.A., Ph.D., University of North Texas.

Chan, Hung C. (2008)....................................... Associate Professor of Accountancy B.S., Oklahoma Christian University; M.B.A., Ph.D., University of Houston, Texas.

Chang, C. Janie (2006)...........................The Vern E. Odmark Chair in Accountancy; Professor of Accountancy B.B.A., Tamkang University, Taiwan; M.S., University of Illinois at Chicago; Ph.D., University of California, Irvine.
Chanin, Joshua M. (2011). $\qquad$ ..Associate Professor of Public Affairs B.A., University of Pennsylvania; M.P.A., Indiana University; Ph.D., American University.
Chen, Jianwei (2007).
Associate Professor of Statistics B. S., National Huaqiao University, China; M.S., Ph.D., Chinese University of Hong Kong, Hong Kong.
Chen, Jun (2018)...... $\qquad$ .. Assistant Professor of Aerospace Engineering B.S., Beihang University, China; M.S., Ph.D., Purdue University.

Chen, Yea-Wen (2016)... $\qquad$ Associate Professor of Communication B.A., National Taiwan Normal University, Taiwan; M.A., University of Texas; Ph.D., University of New Mexico.

Chetty, Raj G. (2019)........Assistant Professor of English and Comparative Literature B.A., University of California, Riverside; M.A., Brigham Young University; Ph.D., University of Washington.
Chilcote, Olivia M. (2017) .................Assistant Professor of American Indian Studies B.A., California State Polytechnic University; M.A., University of California, Berkeley.
Chizhik, Alexander W. (2000) $\qquad$ .Director, Academic Labor Relations, B.A. B.S. Academic Affairs; Professor of Teacher Education Angeles.
Chizhik, Estella W. (1997). $\qquad$ ...Professor of Teacher Education B.A., University of California, Riverside; M.A., Ph.D., University of California, Los Angeles.
Choflet, Amanda B. (2019).. $\qquad$ ... Assistant Professor of Nursing B.S., M.S.N., University of Maryland; D.N.P., Johns Hopkins University.

Choi, Jung Min (2002)...............................................Associate Professor of Sociology B.A., University of California, Berkeley; M.A., University of Miami; Ph.D., York University, Canada.
Chowdhury, M. Zohir (2007).. $\qquad$ ... Associate Professor of Public Health B.S., University of Montana; M.S., California Institute of Technology; Ph.D., Georgia Institute of Technology.
Christakos, George (2006) ...............The Stephen and Mary Birch Foundation Chair in Geographical Studies; Professor of Geography Diploma, National Technical University of Athens, Greece; M.A., Massachusetts Institute of Technology; Ph.D., Harvard University.
Chung-Herrera, Beth G. (2000)... $\qquad$ .. Professor of Management B.A., University of California, Berkeley; M.A., Ph.D., University of Maryland.

Chung, Y. Barry (2018).. $\qquad$ ...Dean, College of Education; Professor of Counseling and School Psychology B.A., National Taiwan Normal University, Taiwan; Ph.D., University of Illinois, Urbana-Champaign.
Cirino, Peter J. (2002)............... Associate Professor of Theatre, Television, and Film B.F.A., Southwest Texas State University; M.F.A., University of California, San Diego.
Ciro, Dianne (2018). $\qquad$ ....Assistant Professor of Social Work B.A., State University of New York, Binghamton; M.S., Columbia University; Ph.D., Hunter College,
Clark, Rulon W. (2007).. $\qquad$ Associate Professor of Biology B.S., Utah State University; Ph.D., Cornell University.

Cline, David P. (2017) $\qquad$ .....Associate Professor of History B.A., Macalester College; M.A., University of Massachusetts; Ph.D., University of North Carolina.
Clò, Clarissa (2005). $\qquad$ .Professor of Italian B.A., University of Bologna, Italy; M.A., University of Cincinnati; Ph.D., University of California, San Diego.
Clune-Taylor, Catherine E. (2019)... $\qquad$ Assistant Professor of Women's Studies B.A., M.A., University of Western Ontario, Canada; Ph.D., University of Alberta, Canada.
Coker, Adeniyi (2018). $\qquad$ ..Professor of Theatre, Television, and Film B.A., University of IFE, Nigeria; M.F.A., Brooklyn College; Ph.D., Temple University.
Cole, Thomas E. (1986) .............Associate Professor of Chemistry and Biochemistry B.S., Purdue University; Ph.D., University of Texas at Austin.

Collins, Lauren (2018)... $\qquad$ ...Assistant Professor of Special Education B.A., M.A., University of Virginia; Ph.D., Old Dominion University.

Colquitt, Clare E. (1986). $\qquad$ .. Associate Professor of English B.A., Texas Christian University; M.A., Ph.D., University of Texas at Austin.

Colvin, Roddrick A. (2017).. $\qquad$ ....Associate Professor of Public Affairs B.A., Indiana University, Bloomington; M.P.A., Seattle University; Ph.D., University at Albany, State University of New York.
Conaty, Donna M. (2007)......................................Professor of Music; Associate Dean, College of Professional Studies and Fine Arts B.M., B.M.E., University of Northern Colorado; M.M., Yale University.

Conte, Jeffrey M. (1998)..........................................Associate Professor of Psychology B.A., University of Virginia; M.S., Ph.D., The Pennsy/vania State University.

Cooksy, Andrew L. (1999)... $\qquad$ Professor of Chemistry and Biochemistry B.A., Harvard University; Ph.D., University of California, Berkeley.

Cordero, Elizabeth D. (2006).............................Associate Professor of Psychology, SDSU Imperial Valley B.A., University of California, Los Angeles; M.A., Ph.D., University of California, Santa Barbara.
Corlett, J. Angelo (1997)... .Professor of Philosophy B.A., Azusa Pacific University; M.A., University of California, Santa Barbara; Ph.D., University of Arizona.

Corliss, Heather L. (2013) $\qquad$ ..Professor of Public Health B.A., University of Wisconsin; M.P.H., Ph.D. University of California, Los Angeles.

Cornelis, Erlinde (2014).. $\qquad$ ...Assistant Professor of Marketing B.A., M.A., Ph.D., Ghent University, Belgium.

Cornforth, Brian D. (1996).. $\qquad$ ... Lecturer in Management B.A., University of Pennsylvania; M.S., Boston University; M.B.A., San Diego State University; Ph.D., University of Texas at Arlington.
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Barra, Donald P., Ed.D. (1983-2000) $\qquad$ Professor of Music
Bart, Kenneth J., M.D. (1998-2004).. ...Professor of Public Health

Bartholomew, Francis M., Jr. Ph.D (1967-2001).............................Associate Professor of History
Basom, Margaret R., Ph.D. (1999-2008).......... Professor of Educational Leadership Baxter, William L., Ph.D. (1963-1992)... $\square$ Beatty, James R., Ph.D. (1973-2013)................Professor of Management Information Systems [Senate Distinguished Professor] Bee, Clifford P., Ph.D. (1969-2000)...............................Professor of Teacher Education Beck, Leland L., Ph.D. (1980-2016) ... 6).........
$\qquad$
$\qquad$ Computer Science Belasco, James A., Ph.D. (1971-2000).................................... Professor of Management Bender, Stephen J., H.S.D. (1970-2004)..............................Professor of Public Health Benkov, Edith J., Ph.D. (1983-2015)............................................................... Benson, Jackson J., Ph.D. (1966-1997) .......................................... Professor of English Berelowitz, Jo-Anne, Ph.D. (1993-2014)...........................Professor of Art and Design Berg, Marlowe J., Ph.D. (1970-2003)......................... Professor of Teacher Education Berg, Robert V., M.F.A. (1963-1992) ........................................................... Professor of Art
 Distinguished Professor of Biology Berta, Annalisa, Ph.D. (1982-2015)............................................................ Bertine, Kathe K., Ph.D. (1973-2000)......................Professor of Geological Sciences Beshgetoor, Donna L., Ph.D. (1996-2013)................ Associate Professor of Exercise and Nutritional Sciences
Betancourt, Ramon (1984-2016)..............................Associate Professor of Electrical and Computer Engineering
Bezuk, Nadine S., Ph.D. (1987-2018)...............Associate Dean, College of Education; Professor of Teacher Education
Bizzoco, Richard W., Ph.D. (1977-2016).........................................Professor of Biology Biggs, Millard R., Ph.D. (1958-1986) ................................................ Professor of Music Blanco, Alda, Ph.D. (2008-2018) .... .Professor of Spanish
Blenner, Janet L., Ph.D. (1986-2014)............................................Professor of Nursing Block, Russell L., J.D. (1969-2004)...............................Associate Professor of Finance Bloomberg, Warner, Jr. Ph.D. (1973-1989).............................. Professor of Sociology
Blue, Carroll Parrott, M.F.A. (1984-2004).................................... Professor of Theatre, Television, and Film
Boddy, Raford D., Ph.D. (1980-2004)........................................ Professor of Economics
Boe, Alfred F., Ph.D. (1968-2003)................................Associate Professor of English
Bohnsack, Kurt K., Ph.D., (1956-1983)...........................................Professor of Zoology
Boostrom, Ronald L., D.Crim. (1971-1996).......................................Professor of Public
Administration and Urban Studies
Borden, Diane L., Ph.D. (1998-2013)................................. Professor of Journalism and
Media Studies
Borges, Marilyn A., Ph.D. (1974-2001)...................................... Professor of Psychology
Bost, John C., J.D. (1979-2003)............... ....... Professor of Finance
Brady, F. Neil, Ph.D. (1982-1994)........................................ Professor of Management
Brady, Richard C., Ph.D. (1977-1998)..........................................Associate Professor of Special Education
Brashear, Howard C., Ph.D. (1968-1992)...................................... Professor of English
Bray Henry G., Ph.D. (1962-1997)................................... Professor of Mathematical and Computer Sciences
Breindl, Michael J., Ph.D. (1986-2003)..........................................Professor of Biology
Broderick, William A., Ed.D. (1977-1994). .Administrator, Media Technology Services
Brodine, Stephanie K., M.D. (1998-2018)...........................Professor of Public Health Broom, Betty L., Ph.D. (1979-2003, except F'85-S'86).................. Associate Professor of Nursing
Brown, Lee, Ph.D. (1978-1994)................................................Professor of Journalism Bryson, Jeff B., Ph.D. (1970-2004) ..........................................Professor of Psychology Bryson, Liane, Ph.D. (1996-2016).................. Lecturer in Rhetoric and Writing Studies Buck, Robert E., Ph.D. (1969-2005)..........................Associate Professor of Sociology Buckalew, James K., Ph.D. (1967-1999).......................... Professor of Communication Bumpus, Jerry D., M.F.A. (1971-1996)................................................ Professor of English
[Senate Distinguished Professor]
Burdick, David L., Ph.D. (1968-1995) .................................................. Mathematical Sciences
Burkett, Richard A., M.F.A. (1989-2017)............................Professor of Art and Design Burnett, Lowell J., Ph.D. (1972-2001)................................................Professor of Physics Butler, David H., Ph.D. (1981-2002).............................................. Butler, Gerald J., Ph.D. (1968-2005)............................................. Professor of English Butler, Harry, Ph.D. (1975-1990)...............................................Professor of Social Work

Butler, Mark C., Ph.D. (1981-2002).................................... Professor of Management Butler, Maria G., M.A. (1981-2002)..............Lecturer in Chicana and Chicano Studies Buyuksonmez, Fatih, Ph.D. (2001-2018)...................Professor of Civil, Construction, and Environmental Engineering
Cadiero-Kaplan, Karen (2001-2017) ...........................Professor of Dual Language and English Learner Education
Calavita, Nico, Ph.D. (1980-2004)............................Professor of Public Administration and Urban Studies
Capettini, Robert J., Ph.D. (1985-2007). $\qquad$ .Professor of Accountancy
Carande, Robert J., M.L.S., M.A., (1987-2013).

| ...........................Associate |
| :---: | ... Librarian

Cargille, Douglas A., M.A., M.L.S. (1978-2001). ..... Professor of Mathematics Carmichael, Nancy M., Ph.D. (1968-1995)...................Assistant Professor of Biology Carpenter, Roger E., Ph.D. (1963-1993).... $\qquad$ ..Professor of Biology Carrano, Carl J., Ph.D. (2003-2017).......... Professor of Chemistry and Biochemistry Carrilio, Terry E., Ph.D. (2002-2007)......................Assistant Professor of Social Work Carroll, John L., Ph.D. (1979-2018) ..... $\qquad$ ..Professor of Computer Science Carter, J.E. Lindsay, Ph.D. (1962-1992)...................... Professor of Physical Education Castro (Castillo), Susana D., Ph.D. (1985-1994)... Caves, Roger W., Ph.D. (1983-2017).................... Professor Public Affair Cegelka, Patricia T., Ed.D. (1980-2004)..................... Professor of Special Education Chaffin, Deborah G., Ph.D. (1984-2012).................Associate Professor of Philosophy Chambers, Martin, Ph.D. (1986-2010)....... $\qquad$ Chambers, Norman E., Ph.D. (1972-2001).....................Professor of Africana Studies Chance, Patti L., Ph.D. (2009-2014) ................... Professor of Educational Leadership Chandler, Shelly E., Ph.D. (1966-2003)...................Associate Professor of Sociology Chang, Albert, M.D. (1991-2007) .....................................................essor of Public Health
Chang, Ching-Ten, Ph.D. (1979-2004)... $\qquad$ .Professor of Electrical and Computer Engineering
Chang, Howard H., Ph.D. (1967-2003). $\qquad$ ...Professor of Civil and Environmental Engineering
Charles, Carol M., Ph.D. (1961-1988)............................. Chase, Geoffrey W., Ph.D. (2001-2015)... Professor of Rhetoric and Writing Studies Chatfield, Dale A., Ph.D. (1978-2012).......................Associate Professor of Chemistry and Biochemistry
Cheek, William F., Ph.D. (1968-2004)........................................................essor of History
Chen, Lo-chai, Ph.D. (1969-2001).... $\qquad$ ...Professor of Biology
Cheng, Li-Rong Lilly, Ph.D. (1984-2008).... .Assistant Director, Global Program Development, College of Extended Studies; Professor of Speech, Language, and Hearing Sciences
Cherin, Antony C., Ph.D. (1982-2003)... $\qquad$ Professor of Finance Chin, Marilyn M., M.F.A. (1987-2013)....................................... Professor of English and Comparative Literature
Choi, Soonja, Ph.D. (1987-2012)... $\qquad$ . Professor of Linguistics Chou, Fang-Hui, Ph.D. (1969-2003).. $\qquad$ ..Professor of Civil and Environmental Engineering
Chow, Chee W., Ph.D. (1984-2005)........................................Professor of Accountancy
Christensen, Kathee M., Ph.D. (1978-2004)... ...Professor of Speech,
Language, and Hearing Sciences
Christian, David, Ph.D. (2001-2008) ................................................ Professor of History
Chu, Paochin, Ph.D. (1967-2001)... ...Professor of History
Clapp, James A., Ph.D. (1968-2001)........................Professor of Public Administration and Urban Studies
Clement, Norris C., Ph.D. (1968-2000)....................................Professor of Economics
Coates, Breena E., Ph.D. (2000-2007).............Associate Professor of Public Affairs, Imperial Valley Campus
Cobble, James W., Ph.D. (1973-2002)..........Vice President for Research and Dean, Graduate Division; Professor of Chemistry
Cobbs, Elizabeth, Ph.D. (1998-2015). American Foreign Relations; Professor of History Cohn, Kathleen C., Ph.D. (2006-2008)............ Professor of Educational Leadership Coleman, Kathleen L., M.A., M.S.L.S. (1973-2002)......................................... Librarian Collier, Boyd D., Ph.D. (1966-1998).................................................Professor of Biology Collier, Gerald, Ph.D. (1961-1995)................................................................... Colston, Stephen A., Ph.D. (1977-2014) ........................Associate Professor of History Colwill, Elizabeth A., Ph.D. (1989-2012)...................................Associate Professor of Women's Studies
Conly, John F., Ph.D. (1962-2003)...................... Professor of Aerospace Engineering and Engineering Mechanics
Conway, Frederick J. (2007-2018)....................Associate Professor of Anthropology Conway, John B., Ph.D. (1981-1992).......................................Professor of Public Health Cooke, Gwen C., Ph.D. (1978-1992)............................ Professor of Family Studies and Consumer Sciences

Cooling, Janet L., M.F.A. (1984-2008)....................................Professor of Art, Design, and Art History
Cornwell, JoAnne, Ph.D. (1984-2010) ...........................Associate Professor of French and Africana Studies
Cottrell, Ann B., Ph.D. (1967-1999)........................................... Professor of Sociology
Cottrell, Don M., Ph.D. (1967-1998)... ..Professor of Physics
Couttolenc, Patricia C., M.F.A. (2008-2018). Associate Professor of Art and Design
Cox, George W., Ph.D. (1962-1996).................................................Professor of Biology
Cox, Thomas J., Ph.D. (1975-2000) ................................................. Professor of French
Cox, Thomas R., Ph.D. (1967-1996)..............................................................
Cummins, Emery J., Ph.D. (1966-2000) ......................... Professor of Counseling and School Psychology
Cunniff, Roger L., Ph.D. (1967-2000)..............................................Professor of History Curry, Joan F., Ed.D. (1972-1997) ................................. Professor of Teacher Education Dahms, Stephen A., Ph.D. (1972-2006)...................................... and Biochemistry
Daly, Donna, M., Ed.D. (2004-2015)........................Assistant Dean for Student Affairs, College of Health and Human Services
Darley, Richard D., Ph.D. (1961-1980)....................................... Professor of Marketing
Daub, Clarence T., Jr. Ph.D. (1967-1999)................................. Professor of Astronomy
Davies, Darlene G., Ed.S. (1976-1994)......................................Assistant Professor of Communicative Disorders
Davis, II, Glover T., M.F.A. (1966-2004)........................................... Professor of English
Davis, Inger P., Ph.D. (1977-1996)........................................................... Davis, Joel J., Ph.D. (1990-2014)..................................... Professor of Journalism and Media Studies
Day, Steven M., Ph.D. (1988-2015).................... The Rollin and Caroline Eckis Chair in Seismology; Professor of Geological Sciences
Dean, Alfred, Ph.D. (1985-2000).......................................................
Deaton, Edmund I., Ph.D. (1960-1992)............... Professor of Mathematical Sciences DeGennaro, Maria R., Ph.D. (1980-2008).................................. Professor of Social Work Defran, Richard H., Ph.D. (1970-2002) .................Associate Professor of Psychology De Peyster, Ann, Ph.D. (1983-2011)........................................ Professor of Public Health Deutsch, Francine, Ph.D. (1981-1999).........................................Professor of Child and Family Development
Deutschman, Douglas H., Ph.D. (1997-2017)................................Professor of Biology Dexter, Deborah M., Ph.D. (1967-2001)..........................................Professor of Biology Dickerson, Mary E., Ph.D. (1967-1990)............................. Assistant Professor of Family

Studies and Consumer Sciences
Dintrone, Charles V., M.A., M.L.S. (1972-2005)...
........................................................arian
Dintrone, Patricia N.L., Ph.D. (1989-2006) ..........Assistant Dean for Student Affairs, College of Business Administration; Lecturer in Management Dionisopoulos, George N., Ph.D. (1985-2018)..............Professor of Communication Dixon, Jesse T., Ph.D. (1979-2013).....................................Professor of Hospitality and Tourism Management
Dobbs, Matti F., Ph.D. (1990-1999)...................................Associate Professor of Public Administration and Urban Studies Dodge, Bernard J., Ph.D. (1980-2019).............................Professor of Learning Design Dominguez, Jesus Y., M.F.A. (1976-2002)............................ Professor of Art, Design, and Art History
Donahue, Thomas S., Ph.D. (1968-2003)................................ Professor of Linguistics Doorlag, Donald H., Ph.D. (1970-1998)....................... Professor of Special Education Doran, Kelly S., Ph.D. (2007-2018) ....................................................Professor of Biology Doran, Martha S., Ph.D. (1996-2011)................. Associate Professor of Accountancy Dorman, Clive E., Ph.D. (1974-2006)........................Professor of Geological Sciences Dorris, Helen L., M.S. (1952-1982)................................ Professor of Family Studies and Consumer Sciences
Dowler, Michael J., Ph.D. (1971-2001).............................................Professor of Biology Downey, Carolyn J., Ph.D. (1988-2004).....................................Associate Professor of Educational Leadership Downing, Christine R., Ph.D. (1974-1992).................... Professor of Religious Studies Dozier, David M., Ph.D. (1980-2013).... .. Professor of Journalism and Media Studies
DuBois, Barbara C., Ph.D. (1989-2004) .............. Assistant Professor of Gerontology Duckworth, Joseph B., Ed.D. (1968-1998)................ Professor of Teacher Education Dukas, Vytas, Ph.D. (1959-1988).. $\qquad$ ... Professor of Russian Dumlao, Gerald C., M.F.A. (1977-1998). $\qquad$ . Associate Professor of Art
Duncan, Mary R., Ph.D. (1973-2001)......Professor of Recreation, Parks and Tourism Dunn, Craig P., Ph.D. (1991-2006)......................Associate Professor of Management Dunn, Roger M., Ph.D. (1983-2010)................ Associate Dean for Academic Affairs, Imperial Valley Campus; Professor of Psychology, Imperial Valley Campus Dunn, Ross E., Ph.D. (1968-2003).................................................Professor of History

Durbin, Gregory C., M.F.A. (1989-2019)........................................Professor of Theatre, Television, and Film
Dutton, Brenton P., M.M. (1981-2016)...........................Professor of Music and Dance Eadie, William F., Ph.D. (2001-2014)................................. Professor of Journalism and Media Studies
Easton, George K., Ph.D. (1987-2011)..................Associate Professor of Management Information Systems
Ebert, Thomas A., Ph.D. (1969-1999) ..................................................
Ehrlich, Sanford B., Ph.D. (1986-2011)...............Associate Professor of Management Eisner, Robert E., Ph.D. (1970-2003)..................Professor of Classics and Humanities El-Assal, Mohamed M.E., Ph.D. (1967-1992)............................ Professor of Sociology
Elder, John P., Ph.D. (1984-2013). $\qquad$ ..Albert W. Johnson Distinguished Professor of Public Health [Senate Distinguished Professor]
Elliott, Rosalie C., Ph.D. (1968-1982).....................Professor of Elementary Education Elwin, John D., Ph.D. (1969-2004)........................................................ Emerick, Robert E., Ph.D. (1968-2004)..................................... Professor of Sociology Erickson, Paul, Ed.D. (1963-1986) ..................................Professor of Teacher Education Espín, Olivia M., Ph.D. (1990-2002)................................ Professor of Women's Studies Espinosa, Ruben W., Ph.D. (1978-2010)...........................Professor of Policy Studies in Language and Cross-Cultural Education
Estes, Russell G., Ed.D. (1963-1992)................................................................
Etschmaier, Gale S., Ed.D. (2011-2018)............Dean, Library and Information Access Etzel, Paul B., Ph.D. (1986-2010)..................................Professor of Astronomy; Director of the Mt. Laguna Observatory
Evans, Ronald W., Ed.D. (1989-2017). $\qquad$ .Professor of Teacher Education
Fairlie, Lyndelle, Ph.D. (1973-2010)...............Associate Professor of Political Science Farber, Gerald H., Ph.D. (1968-2004)................................................ Comparative Literature
Farnan, Nancy, Ph.D. (1989-2016)................................Professor of Teacher Education
Fatemi, Khosrow, Ph.D. (1998-2004). $\qquad$ Dean, Imperial Valley Campus; Professor of Management, Imperial Valley Campus
Fearn, Leif, Ed.D. (1967-2009)...................................Professor of Teacher Education Feenberg, Andrew L., Ph.D. (1969-2004) .............................. Professor of Philosophy Feeney, William R., Ph.D. (1974-1997).................. Associate Professor of Information and Decision Systems
Feher, Elsa, Ph.D. (1971-1997)... $\qquad$ ..Professor of Physics
Feinberg, Lawrence B., Ph.D. (1977-2002). Associate Vice President for Research and Technology, Graduate and Research Affairs; Professor of Counseling and School Psychology
Fenson, Larry, Ph.D. (1975-2003) $\qquad$ ..Professor of Psychology
Ferraro, Joanne M., Ph.D. (1984-2016) Albert W. Johnson Distinguished Professor of History
 Fikes, Robert, Jr. M.A., M.A.L.S. (1977-2012).................................................. Librarian Filner, Robert E., Ph.D. (1970-1992) ..............................Associate Professor of History Finnegan, Daniel J., Ph.D. (1990-2015)...............Associate Professor of Social Work
Fisch, Arline M., M.A. (1961-1996)...
[Senate Distinguished Professor]
Fisher, Kathleen M., Ph.D. (1988-2004)........................................Professor of Biology Fitzsimmons, Lorraine T., D.N.S. (1985-2017)...........Associate Professor of Nursing Flagg, Joan M., Ph.D. (1969-2002)...............................Associate Professor of Nursing Flatley, Marie E., Ph.D. (1979-2007)............................... Professor of Information and Decision Systems
Flemion, Philip F., Ph.D. (1968-1998) ............................Associate Professor of History Forbing, Shirley E., Ed.D. (1969-1992)........................ Professor of Special Education Francis, Peter R., Ph.D. (1981-2003)....................................... Professor of Exercise and Franklin, Jan .Professor of Biology
Frantz, Roger S., Ph.D. (1978-2012)........................................... Professor of Economics
Franz, Edward P., M.A. (1965-2003)............................ Associate Professor of Exercise and Nutritional Sciences
Franzini, Louis R., Ph.D. (1969-2001) ...................................... Professor of Psychology
Fredrich, Barbara E., Ph.D. (1972-2004)..................................Professor of Geography
Freeman, Roderick A., Ph.D. (1978-2009)................................... Lecturer in Philosophy
Freitas, Lorraine, Ph.D. (1984-2004)............................Associate Professor of Nursing
Frey, Leonard H., Ph.D. (1956-1989)......................................... Professor of Linguistics
Frey, Terrence G., Ph.D. (1986-2011)......................................................essor of Biology
Friedman, Abraham M., Ph.D. (1963-1983)... ..Associate Professor of Physical Education
Friedrichs, Charles J., Ed.D. (1983-2018) .......................Associate Professor of Music Frost, Christopher J., Ph.D. (2006-2011)............Associate Dean for Undergraduate Studies; Professor of Religious Studies
Gamble, Lynn H., Ph.D. (1997-2009). $\qquad$ Professor of Anthropology
Ganster, Paul, Ph.D. (1984-2011). $\qquad$ Director, Field Stations Program;

Garrett, Kenneth C., M.Div. (1994-2003) ................................Lecturer in Accountancy Garrison, Betty B., Ph.D. (1962-1996)................. Professor of Mathematical Sciences Garrison, Leslie, Ed.D. (1991-2008).......................................... Professor of Education, Imperial Valley Campus
Gast, David K., Ed.D. (1963-1991) ................................. Professor of Teacher Education Gattas, Joyce M., Ph.D. (1982-2018).................Dean, College of Professional Studies and Fine Arts; Professor of Hospitality and Tourism Management Gay, Phillip T., Ph.D. (1976-2007).... .. Professor of Sociology
Gazell, James A., Ph.D. (1968-2008).. $\qquad$ .. Professor of Public Affairs Gefter, Irving, Ph.D. (1970-1992)...................Assistant Professor of Religious Studies Gega, Peter C., Ed.D. (1955-1987)... $\qquad$ ...Professor of Teacher Education Geist-Martin, Patricia J., Ph.D. (1990-2018) ...................Professor of Communication [Senate Distinguished Professor]
Genovese, E. Nicholas, Ph.D. (1970-2003)................................. Professor of Classics and Humanities
 German, Randall M., Ph.D. (2008-2016)..........Professor of Mechanical Engineering Gersberg, Richard M., Ph.D. (1986-2018) ............................Professor of Public Health Gervais, Ronald J., Ph.D. (1969-2010).............................................. Professor of English Getis, Arthur, Ph.D. (1990-2004).................The Stephen and Mary Birch Foundation Chair in Geographical Studies; Albert W. Johnson Distinguished Professor of Geography
Geveci, Tunc, Ph.D. (1985-2013). $\qquad$ . Professor of Mathematics Gibson, Rich, Ph.D. (2000-2006)............. Associate Professor of Teacher Education Gibson, Sharan A., Ph.D. (2002-2016)....................... Professor of Teacher Education Gillette, Thomas L., Ph.D. (1961-1989)....................................... Professor of Sociology Girty, Gary H., Ph.D. (1984-2015).............................Professor of Geological Sciences [Senate Distinguished Professor]
Gitchoff, Thomas, G., D.Crim. (1969-2001).
 Administration and Urban Studies
Gitman, Lawrence J., Ph.D. (1989-2004) ...................................... Professor of Finance Goldberg, Fred M., Ph.D. (1986-2012)............................................. Professor of Physics Gottlieb, Roberta A., M.D. (2007-2013)..........................................Professor of Biology Goyne, Carol L., M.A., M.S.L.S. (1969-2002) ..................................Associate Librarian Graf, Richard G., Ph.D. (1968-2008).........................................Professor of Psychology Graham, William K., Ph.D. (1973-2003)...................................Professor of Psychology Grajeda-Higley, Leilani, B.S.N. (1994-2014)............................Lecturer in Chicana and Chicano Studies
Graves, Anne W., Ph.D. (1990-2016)............................. Professor of Special Education Greenfeld, Philip J., Ph.D. (1969-2005) .. $\qquad$ Professor of Anthropology Greenwood, Ned H., Ph.D. (1964-1995) ....................................Professor of Geography Gregory, Sinda J., Ph.D. (1977-2005, except S'84)........................ Professor of English Griffin, Ernst C., Ph.D. (1972-2004)................Special Assistant to the Associate Vice President for Academic Affairs; Professor of Geography
Griffin, Ronald W., Ph.D. (1967-2001).. ....Professor of Social Work
Griswold, Jerome J., Ph.D. (1980-2006). Professor of English
Griswold del Castillo, Ricardo, Ph.D. (1974-2007).............Professor of Chicana and Chicano Studies
Grone, Robert D., Ph.D. (1986-2010)................................... Professor of Mathematics Grossbard, Shoshana A., Ph.D. (1981-2013)........................... Professor of Economics
Grubbs, Edward J., Ph.D. (1961-1997)......................................... Professor of Chemistry
Grudnitski, Gary M., Ph.D. (1988-2018)...............Director, Undergraduate Programs, Fowler College of Business; Professor of Accountancy
Guentzler, William D., Ph.D. (1968-2004).............Professor of Industrial Technology
Guidry, Rosalind, Ph.D. (1970-1989).................... Associate Professor of Social Work
Gumbiner, Judith G., M.A. (1967-2004)................................Director, Career Services, Student Affairs; Counselor
Gupta, Dipak K., Ph.D. (1977-2010)............................Albert W. Johnson Distinguished Professor of Political Science
Gurol, Mirat D., Ph.D. (1997-2007)..........................The Blasker Chair in Environmental Engineering; Professor of Civil and Environmental Engineering Gutierrez-Clellen, Vera F., Ph.D. (1990-2014) ............................. Professor of Speech, Language, and Hearing Sciences Haas, Robert W., Ph.D. (1967-1997)........................................... Professor of Marketing Hadley, Sue A., D.N.S. (1985-2018)...............................Associate Professor of Nursing Hager, Richard A., Ph.D. (1967-2000).................................Professor of Mathematical

Hale, E. Alan, Ph.D. (1957-1987).... and Computer Sciences

Hall, Marilyn E., M.L.I.S. (1999-2014). $\qquad$ . Professor of Marketing
Hall, Marilyn E., M.L.I.S. (1999-2014)................................................Associate Librarian
Hambleton, John W., Ph.D. (1969-2003)...........Associate Professor of Economics Hamilton, Charles D., Ph.D. (1974-2001)................. Professor of History and Classics Hammer, Gerald K., Ed.D. (1963-1992)..................Professor of Industrial Technology Hampton, David R., Ph.D., J.D. (1964-2004) ..................... Professor of Management Hampton, Nan Zhang, Ph.D. (2005-2019).. $\qquad$ ..Professor of Administration, Rehabilitation and Postsecondary Education

Hanscom, III, Zac, Ph.D. (1978-2002)......................... Associate Professor of Biology Hansen, Wilburn N., Ph.D. (2007-2016).....................................Associate Professor of Religious Studies
Hanson, Robert F., Rec.D. (1962-1983)...
 ..Professor of Recreation Harbert, Anita S., Ph.D. (1979-2008) ..Professor of Social Work Harkányi, Katalin, M.L.S. (1969-2003)................................................................. Librarian Harley, Bruce L., M.L.S. (1990-2018)..... $\qquad$ ... Librarian harris, fredric j., Ph.D. (1968-2017)......................................Professor of Electrical and Computer Engineering
Harris, Janet C., Ph.D. (2006-2010)... .Professor of Exercise and Nutritional Sciences
Harris, Jay H., Ph.D. (1980-2009)....................... Professor of Electrical and Computer Engineering
Harris, Mary E., M.A.L.S. (1982-1992).... 2)..............................................Associate Librarian Harris, Olita D. (1979-2013).................Associate Dean, College of Health and Human Services; Associate Professor of Social Work
Harrison, Patrick J., Ph.D. (1970-2000)............Professor of Educational Technology Hartung, Barbara W., Ph.D. (1976-2001)..........Executive Assistant to the President; Professor of Communication
Harvey, Anne-Charlotte, Ph.D. (1984-2003)................................ Professor of Theatre Harvey, Michael L., Ph.D. (1969-2001)........................................... Professor of Theatre Hatch, Patricia A., Ph.D. (2006-2019)....................................... Professor of Counseling and School Psychology
Hatch, Richard A., Ph.D. (1975-2000).............................. Professor of Information and Decision Systems
Hatton, Diane C., D.N.Sc. (2007-2012)...
 . Professor of Nursing
Haworth, Glenn O., D.S.W. (1966-1987)..

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| :---: | :---: | Professor of Social Work

Hayakawa, Joanne, M.F.A. (1982-2010)................................Professor of Art, Design, and Art History
Hayes, Charlotte E., M.S. (1972-2004)..............................Counselor, Counseling and Hayhurst, David T., Ph.D. (2002-2014) ........................ Dean, College of Engineering; Professor of Civil, Construction, and Environmental Engineering Heck, Edward V., Ph.D. (1983-2009) .............................. Professor of Political Science Heighton, Elizabeth J., M.S. (1966-1992)... $\qquad$ Professor of Telecommunications and Film Heineken, Janet R., Ph.D. (1980-2007).......................................... Professor of Nursing Heinrichs, Waldo, Ph.D. (1991-1996).................................................Professor of History Hellweg, Susan A., Ph.D. (1979-2009) .......................... Professor of Communication Helzer, Richard A., M.F.A. (1986-2014)............................................ Professor of Music Hemmingsen, Barbara B., Ph.D. (1973-2004) ..............................Professor of Biology Hempel, Graham, M.A. (1979-2010)..............................Associate Professor of Dance Henderson, Joel H., Ph.D. (1971-2000)........................................................... Administration and Urban Studies Henry, Edward O., Ph.D. (1974-2004)................................. Professor of Anthropology Henry, Stuart D., Ph.D. (2006-2018, except 2010-2011)....... Professor of Public Affairs Hergert, Michael L., Ph.D. (1985-2010)... $\qquad$ Professor of Management Herzog, Lawrence A., Ph.D. (1989-2014). . Professor of Public Affairs Heyman, Neil M., Ph.D. (1969-2002) ................................................ Professor of History Hidalgo, Margarita G., Ph.D. (1987-2008)...................................Professor of Spanish Higurashi, Yoshiko, Ph.D. (1983-2018)........................................Professor of Japanese Hill, Richard B., Jr. Ph.D. (1969-1999) ......................Assistant Professor of Sociology, Imperial Valley Campus
Hill, Wayne O., Ed.D. (1955-1983)..........................Professor of Elementary Education Hillix, William A., Ph.D. (1963-1992, except 1967-1969)... . Professor of Psychology
Himes, Ronald S., Ph.D. (1969-2002)................................. Professor of Anthropology Hindman, Jane E., Ph.D. (1996-2007)..........................Associate Professor of Rhetoric and Writing Studies
Hines, Jeanette D., D.N.S. (1977-1991)........................Associate Professor of Nursing Hintzman, William R., Ph.D. (1969-2000).................................Associate Professor of Mathematical and Computer Sciences
Hippaka, William H., Jur.D. (1957-1990).........................................Professor of Finance Hobbs, John A., Ph.D. (1964-1998)...............Associate Professor of Political Science Hoffman, Robert P., Ph.D. (1995-2013)............................................... Educational Technology
Hofherr, Louise K., Ph.D. (1987-2010)................Associate Professor of Public Health Hofstetter, C. Richard, Ph.D. (1983-2010)...............................Associate Professor of Political Science
Hohm, Charles F., Ph.D. (1973-2004).. $\qquad$ .. Professor of Sociology Hohman, Melinda M., Ph.D. (1995-2018) ...............................Professor of Social Work Hoidal, Oddvar K., Ph.D. (1967-2003)................................................. Professor of History Holler, Linda D., Ph.D. (1981-2010)............................. Associate Dean, College of Arts and Letters; Professor of Religious Studies
Hope, Allen S., Ph.D. (1986-2016)... and Letters; Professor of Religious Studies

Hopkins, Ronald H., Ph.D. (1991-1998)...........................Vice President for Academic Affairs; Professor of Psychology
Hornbeck, Frederick W., Ph.D. (1968-2007).......................... Professor of Psychology Houston, Arthur L., Jr. Ph.D. (1986-2002)....................................Professor of Finance Houston, Carol O., Ph.D. (1986-2004)..................................Professor of Accountancy Hovda, Ric A., Ph.D. (2007-2013) ......................................Dean, College of Education; Professor of Teacher Education Hovell, Melbourne F., Ph.D. (1982-2015).................Albert W. Johnson Distinguished Professor of Public Health
Howard, Raymond C., Ed.D. (1974-1989)..................................Associate Professor of Counselor Education
Hoyt, Jack W., Ph.D. (1981-1992).........................Professor of Mechanical Engineering Huckle, Patricia, Ph.D. (1975-2001)............................... Professor of Women's Studies Huffman, Edward W., Ph.D. (1955-1980)........................................Professor of Zoology Hughes, Margaret J., Ph.D. (1997-2004).............Associate Professor of Social Work Hui, Stefen Y., Ph.D. (1988-2015)...... $\qquad$ . Professor of Mathematics Hunter, Lauren P., Ph.D. (2004-2018).. $\qquad$ Professor of Nursing Hunter, Lawrence B., M.A. (1963-1989).................................................. Professor of Art Hurlbert, Stuart H., Ph.D. (1970-2006)............................................Professor of Biology Hussain, Nihad A., Ph.D. (1969-2000).............. Professor of Mechanical Engineering Hutchinson, George, Ph.D. (1973-1994) ....................................Associate Professor of Recreation, Parks and Tourism
Ima, Kenji, Ph.D. (1972-2000). $\qquad$ Professor of Sociology
Impelluso, Thomas J., Ph.D. (1998-2013)........Professor of Mechanical Engineering Ingmanson, Dale E., Ed.D. (1968-1999).......................Professor of Teacher Education Iosupovici, Alexander, Ph.D. (1978-2001)...........................Professor of Electrical and Computer Engineering Irgang, Frank J., Ph.D. (1956-1982)............................... Professor of Industrial Studies Jackson, Elizabeth R., Doctorat (1969-1986)..................................Professor of French Jacobs, Ron, L., Ph.D. (1982-2005)........................................ Professor of Administration,

Rehabilitation and Postsecondary Education [Senate Distinguished Professor] Jaffe, Harold, Ph.D. (1982-2019)... $\qquad$ .. Professor of English and Comparative Literature
James-Ward, Cheryl M., Ed.D. (2007-2018). ..............Associate Professor of Educational Leadership Jiménez-Vera, Arturo, Ph.D. (1970-1992)................................................. Jiracek, George R., Ph.D. (1980-2004)...................Professor of Geological Sciences Joh, Gun-Ho, Ph.D. (1988-2018)......................... Associate Professor of Accountancy Johns, Ann M., Ph.D. (1975-2002)............. Professor of Rhetoric and Writing Studies and Linguistics [Senate Distinguished Professor] Johnson, Hiroko, Ph.D. (2000-2011)..................... Associate Professor of Art, Design, and Art History Johnson, John R., Ph.D. (2000-2014)..........................................Associate Professor of Special Education Johnson, Kenneth D., Ph.D. (1972-2001).......................................Professor of Biology Johnson, Leslie S., M.S. (1990-2014).....................Assistant Dean for Student Affairs, College of Arts and Letters
Johnson, Philip E., M.S.C.E. (1958-1987)........................Professor of Civil Engineering Johnson, Warren A., Ph.D. (1969-1997)....................................Professor of Geography Jones, Evangelina B., Ph.D. (1990-2006)......................Associate Professor of Policy Studies in Language and Cross-Cultural Education Jones, Kathleen B., Ph.D. (1981-2003)...........................Professor of Women's Studies Jones, Loring P., D.S.W. (1989-2017)............................................... Jones, Walter D., Ph.D. (1962-1991)... $\qquad$ ... Professor of Chemistry Jordan, G. Ray, Jr. Ph.D. (1966-1987).....................................essor of Religious Studies Jorgensen-Funk, Sandra E., Ph.D. (1987-2016).................Director, Counseling and Psychological Services, Student Affairs
Joseph, Lionel, Ph.D. (1947-1971)... $\qquad$ ...Professor of Chemistry Josephson, Ronald V., Ph.D. (1975-2001). Professor of Exercise and Nutritional Sciences
Kaatz, James M., Ed.D. (1967-1992)......... Associate Professor of Teacher Education Kalustian, Paula, M.F.A. (1989-2015)........Professor of Theatre, Television, and Film Kaplan, Jeffrey P., Ph.D. (1976-2015) $\qquad$ .Professor of Linguistics Karen, Robert L., Ph.D. (1964-1985) $\qquad$
3)............................................ Professor of Psychology Kartalija, Michael A., Ph.D. (1976-2013). . Professor of Marketing Kartman, Arthur E., Ph.D. (1968-2005)... $\qquad$
. 70-2001)................. .. Professor of Economics Kass, Norman, Ph.D. (1961-1997)............................................. Professor of Psychology Kehler, Dorothea F., Ph.D. (1970-2001)........................................... Professor of English Keiser, Robert K., Ph.D. (1968-2004).................................................. Political Science
Keith, Carolyn (C.J.), M.A. (1994-2018).........Lecturer in Theatre, Television, and Film Kelley, Joseph B., D.S.W. (Under contract 1968-1969; 1970-1998)................... Professor of Social Work
Kelly, Patricia R., Ph.D. (1999-2009)... Professor of Teacher Education Kern, Philip J., Ph.D. (1968-1994)... $\qquad$ Professor of Geological Sciences

Khalil, Issa J., Ph.D. (1969-1992)...................Associate Professor of Religious Studies Kilpatrick, Alan E., Ph.D. (1993-2010)................Professor of American Indian Studies King, Harry A., Ph.D. (1978-1997)..... Professor of Exercise and Nutritional Sciences King, Ronald F., Ph.D. (2003-2019)................................. Professor of Political Science Kish, Kathleen V., Ph.D. (1999-2004).. $\qquad$ Professor of Spanish
Kitano, Margie K., Ph.D. (1988-2009)............Associate Dean, College of Education; Professor of Special Education
Kline, Ronald A., Ph.D. (1997-2016)....................Professor of Mechanical Engineering Klonoff, Elizabeth A., Ph.D. (2000-2016)............................... Professor of Psychology Koch, Alma L., Ph.D. (1983-2013).................................................... Kohen, Janet A., Ph.D. (1980-2001).............Associate Professor of Women's Studies Kolar, Jane M., Ph.D. (1975-2012)................................................... Professor of Music Kolen, Paul T., Ph.D. (1987-2016) .. $\qquad$ Professor of Electrical and Computer Engineering
Kolkhorst, Fred W., Ph.D. (1998-2017) $\qquad$ Professor of Exercise and Nutritional Sciences
Kolody, Bohdan, Ph.D. (1972-2008)... $\qquad$ . Professor of Sociology
Koolish, Lynda L., Ph.D. (1989-2010).. Professor of English and Comparative Literature
Kornweibel, Theodore, Jr. Ph.D. (1977-2001)................Professor of Africana Studies
Koster, Alexis, Ph.D. (1983-2017).....Professor of Management Information Systems Kramer, Steven J., Ph.D. (1985-2018) ........................Professor of Speech, Language, and Hearing Sciences
Krekorian, Neil C., Ph.D. (1970-2001)....................................................... Krentler, Kathleen A., D.B.A. (1981-2014)............Director of Assessment, College of Business Administration; Professor of Marketing Krishnamoorthy, Govindarajalu, Ph.D. (1968-2003)... $\qquad$ Professor of Civil and Environmental Engineering Krummenacher, Daniel, Ph.D. (1968-1988)...........Professor of Geological Sciences Kuhlman, Natalie A., Ph.D. (1979-2003) $\qquad$ ..Professor of Policy Studies in Language and Cross-Cultural Education
Kushner, Howard I., Ph.D. (1980-2002) ............................................Professor of History Lackritz, James R., Ph.D. (1977-2010).............. Associate Dean for Academic Affairs, College of Business Administration; Professor of Management Information Systems
Laiho, Ethel E., M.S. (1964-1982). Associate Professor of Nursing LaMaster, Kathryn J., Ph.D. (1996-2016).....Associate Vice President for Academic Affairs, Resource Management; Professor of Exercise and Nutritional Sciences Lamke, Gene G., M.A. (1973-2006)........Professor of Recreation, Parks and Tourism LaMonica, Grace, M.S. (1966-1992)............................. Assistant Professor of Nursing Landis, Jean, M.S. (1968-1979) ....................Assistant Professor of Physical Education Landis, Vincent J., Ph.D. (1954-1997) .......................................... Professor of Chemistry Landsverk, John A., Ph.D. (1990-2004).................................... Lane, Jo Ann, M.S. (2000-2009)............................................. Langenbach, Robert G., Ed.D. (1959-1981)........... Professor of Information Systems Lantz, John M., Ph.D. (1986-1998)............................................................ Lapp, Diane K., Ed.D. (1978-2009) ............................Albert W. Johnson Distinguished Professor of Teacher Education Larlham, Margaret C., M.A. (1989-2014, except 1992)................. Professor of Theatre, Television, and Film
Larlham, Peter F., Ph.D. (1987-2012)..........Professor of Theatre, Television, and Film Latta, Raymond F., Ph.D. (1977-2002)............... Professor of Educational Leadership Leach, Larry L., Ph.D. (1968-2003).. $\qquad$ Professor of Anthropology Leach, Robert W., Ph.D. (1988-2016)....................Resident Astronomer in Astronomy Leasure, J. William, Ph.D. (1962-1992).................................... Professor of Economics Lebherz, Herbert G., Ph.D. (1976-1996)..............................................essor of Chemistry Leckart, Bruce T., Ph.D. (1968-1993)........................................ Professor of Psychology Lee, Dalton S., Ph.D. (1985-2003)....................................Associate Professor of Public Administration and Urban Studies Lee, Gordon K.F., Ph.D. (2000-2015)....................................... Professor of Electrical and Computer Engineering
Lee, Long C., Ph.D. (1982-2012)... Professor of Electrical and Computer Engineering
Lee, Raymond, Ph.D. (1977-1992)..........................Associate Professor of Psychology Lesley, F. David, Ph.D. (1970-2006)......................................................... Leslie, Norman C., M.N. (1969-1988) ............................ Assistant Professor of Nursing Lewin, Harlan J., Ph.D. (1967-2000).............Associate Professor of Political Science Lewis, Rena B., Ph.D. (1978-2006)............................... Professor of Special Education Liebowitz, Marian, D.M.A. (1984-2015). $\qquad$ Professor of Music Lightner, Kevin M., Ph.D. (1968-2004)........................................fessor of Accountancy Lightner, Sharon M., Ph.D. (1977-2012) ............. Associate Professor of Accountancy Lilly, Roger A., Ph.D. (1968-2001)... $\qquad$ .Professor of Physics Lim, Soh-Leong, Ph.D. (2004-2015)......................Associate Professor of Counseling and School Psychology

Lin, Mao-Shiu, Ph.D. (1966-2002).........................................Professor of Electrical and Computer Engineering
Lindsay, Suzanne P., Ph.D. (2007-2015) ...........Associate Professor of Public Health Lippold, Lois K., Ph.D. (1968-2003).................................... Professor of Anthropology Litrownik, Alan J., Ph.D. (1971-2010).. $\qquad$ Professor of Psychology Little, D. Richard, Ph.D. (1974-1995)...
)................................................ Professor of Political Science Littrell, Jarleen (Charlie), M.A. (1987-2016)......................Lecturer in Teacher Education Livingston, Nancy M., Ed.D. (1982-2008).................. Lecturer in Teacher Education, Imperial Valley Campus Locklear, Linda R., M.A. (1988-2018)......................ecturer in American Indian Studies Lookinland, Sandra, Ph.D. (1981-2004, except 1997-2002) ........ Professor of Nursing Loveman, Brian E., Ph.D. (1973-2008).......................... Professor of Political Science Lujan, Jaime, Ph.D. (1979-2004)............... Associate Professor of Teacher Education Lustig, Myron W., Ph.D. (1978-2006)........................................essor of Communication Lutz, Donald A., Ph.D. (1986-2004)..... $\qquad$ . Professor of Mathematics Lybarger, Alvin E., Ed.D. (1970-1992)... $\qquad$ ...Associate Professor of Mechanical Engineering
Lyman-Hager, Mary Ann, Ph.D. (1997-2017).......................................... Lynch, Eleanor W., Ph.D. (1979-2003)......................... Professor of Special Education Lyons-Lawrence, Carolena L., Ph.D. (1987-2004) ..................Associate Professor of Information and Decision Systems MacDonald, Gretchen, Ph.D. (1966-1981)............Associate Professor of Study Skills Macera, Caroline A., Ph.D. (2001-2014)... $\qquad$ ..Professor of Public Health Macky, David W., Ph.D. (1969-1998) ..................Associate Professor of Mathematical and Computer Sciences
Madhavan, Murugappa C., Ph.D. (1968-1999)....................... Professor of Economics and Asian Studies
Madsen, Roy P., Ph.D. (1966-1991)........... Professor of Telecommunications and Film Mansfield, George A., Jr. M.S.M.E. (1968-1994)... . Professor of Mechanical Engineering Marcus, Bernard, Ph.D. (1966-1996)...........................................Associate Professor of Mathematical Sciences
Marino, Leonard, R., Ph.D. (1973-2010)............Professor of Electrical and Computer Engineering
 University Provost
Marovac, Nenad, Ph.D. (1980-2003)..........................Professor of Computer Science Marshall, C. Monte, Ph.D. (1975-2001)....................Professor of Geological Sciences Marshall, Sandra P., Ph.D. (1985-2010).. $\qquad$ ...Professor of Psychology Martin, Donald R., Ph.D. (1969-2004)..............................Associate Dean, College of Professional Studies and Fine Arts; Associate Professor of Communication Martin, Joan L., Ed.D. (1970-1992)................................Professor of Family Studies and Consumer Sciences Martin, John E., Ph.D. (1986-2007).................................................... Maruyama, Wendy L., M.F.A. (1989-2010)..............................Professor of Art, Design, and Art History
Mason, CheryI L., Ph.D. (1987-2010)............................ Professor of Teacher Education
Massey, Gail A., Ph.D. (1981-1997)...................................... Professor of Electrical and Computer Engineering
Mathewson, James H., Ph.D. (1964-1992) .............................. Professor of Chemistry Mathiesen, Sally G., Ph.D. (2002-2019)...................................Professor of Social Work Mathison, Carla S., Ph.D. (1983-2013)...............Professor of Educational Technology Matlin, David, Ph.D. (1997-2012) .... ................................ Professor of English May, Thomas L., Ph.D. (1971-1998) ...........................Associate Professor of Astronomy Mayer, Joni A., Ph.D. (1986-2010)... $\qquad$
 Technology and Librarianship

McBride, James F., M.S. (1988-2017)....... Lecturer in Journalism and Media Studies McCaffery, Lawrence F., Ph.D. (1976-2004)... $\qquad$ Professor of English and Comparative Literature McClard, Donavon Q., Ph.D. (1966-1986).................. Professor of Special Education McClenaghan, Leroy R., Jr. (1977-2014)...........................................Professor of Biology McCordick, Sharon M., Ph.D. (1969-2001).........Associate Professor of Psychology McCormack, Alan J., Ed.D. (1987-2004).....................Professor of Teacher Education McDean, Harry C., Ph.D. (1971-2003)...... $\qquad$ ..Professor of History
McEowen, Harold R., Ph.D. (1967-1992)... Associate Professor of Industrial Technology
McFall, John B., Ph.D. (1966-1985)... $\qquad$ . Professor of Marketing
McFarlane, Fred R., Ph.D. (1972-2008)... $\qquad$ ...Professor of Administration, Rehabilitation and Postsecondary Education
McIntosh, Angela S., Ph.D. (2001-2015).....................................Associate Professor of Special Education
McGhie, Robert D., Ph.D. (1967-1997)... Professor of Civil and Environmental Engineering

McGivern, Robert F., Ph.D. (1991-2018).................................. Professor of Psychology
 McKenzie, Randi E., M.Ed. (1980-2016)................Assistant Dean for Student Affairs, Colllege of Professional Studies and Fine Arts
McKenzie, Thomas L., Ph.D. (1980-2004). $\qquad$ .Professor of Exercise and Nutritional Sciences
McKerrow, Margaret, Ph.D. (1971-2003)... $\qquad$ Professor of Theatre, Television, and Film
McLeod, Dan D., Ph.D. (1964-1993). $\qquad$ Professor of English and Comparative Literature
McLeod, Douglas B., Ph.D. (1972-2001).. $\qquad$ Professor of Mathematics
McPhail, Martha E., M.S.L.S., M.A. (1988-2010)...
$\qquad$ Professor of Health Science McTaggart, Aubrey C., Ph.D. (1962-1992)... Meador, Thomas C., M.A. (1966-2001)........Associate Professor of Communication Meadows, Eddie S., Ph.D. (1972-2001).... $\qquad$ Professor of Music
Mechikoff, Robert A., Ph.D. (1981-2010). $\qquad$ .Professor of Exercise and Nutritional Sciences
Medeiros, Frank A., Ph.D. (1977-2006, except F'96-S'98) ..... Professor of Education, Imperial Valley Campus
Mehaffy, George L., Ph.D. (1986-1994).......................Professor of Teacher Education Meier, Robert A., Ph.D. (1972-1986)........................................... Professor of Accountancy Meigs, Robert F., Ph.D. (1972-1996)... $\qquad$ .Professor of Accountancy Meno, Lionel R., Ph.D. (1999-2009).................. Professor of Educational Leadership Merino, Alfred, Ed.D. (1974-2001)...............Associate Dean, Imperial Valley Campus; Professor of Administration, Rehabilitation and Postsecondary Education
Merritt, Susan C., M.F.A. (1986-2013)................................Professor of Art and Design Metzger, Robert P., Ph.D. (1968-2009)...
$\qquad$
$\qquad$ .Professor of Chemistry and Biochemistry
Mikitka-Gomez, Kathleen F., Ph.D. (1974-2010)..... Professor of Teacher Education Miles, E. Walter, Ph.D. (1966-1998)..................................Professor of Political Science Miller, Allan W., M.F.A. (1963-2004)........... Professor of Art, Design, and Art History Miller, Ralph Llewellyn, Ph.D. (1963-1996)............................. Professor of Counseling and School Psychology
Miller, Richard H., Ph.D. (1977-2001).......................Professor of Geological Sciences Mitchell, Danlee G., M.S. (1964-2000)... $\qquad$ Moaney, Eric R., M.F.A., M.S. (1968-1998)...
......
............................................... Assistant Professor of Art Moellendorf, Darrel, Ph.D. (2002-2013) ............................................. Moffett, Myrna J., Ph.D. (1968-1998)........................... Assistant Professor of Nursing Monroe, Ronald E., Ph.D. (1973-1997)...............................................Professor of Biology Monteverde, John P., Ph.D. (1954-1986)................................. Professor of English and Comparative Literature
Moore, Mary Jane, Ph.D. (1972-2002) ..............Associate Professor of Anthropology Moore, Rebecca E., Ph.D. (1999-2015)......................Albert W. Johnson Distinguished Professor of Religious Studies [Senate Distinguished Professor] Mora, Jill K., Ed.D (1994-2007)................... Associate Professor of Teacher Education Moreno, Steve G., Ed.D. (1969-1998)..........................Professor of Teacher Education
Morey, Ann I., Ph.D. (1985-2003) ........... $\qquad$ ..Distinguished Research Professor; Director, Center for Educational Leadership, Innovation and Policy Morgan, Patricia, M.A. (1985-2016).............Lecturer in Rhetoric and Writing Studies Morris, Rita I., Ph.D. (1990-2002) .................................Associate Professor of Nursing Moss, Barbara, Ph.D. (2001-2013) ...............................Professor of Teacher Education Murphy, Monica A., Ph.D. (1969-1992) ........................Professor of Teacher Education Murphy, Robert J., Ph.D., (1964-1996)..............Professor of Mechanical Engineering Nagel, Anne L., Ph.D. (1971-2002, except F'71-F'73) ....Lecturer in Teacher Education Nagel, Thomas S., Ph.D. (1969-1995).........................Professor of Teacher Education Nakamura, Kotaro, M.A. (1980-2019).................................Professor of Art and Design Nam, Woo Hyun, Ph.D. (1968-1998)...................................... Professor of Economics
Naughton, Gail K., Ph.D. (2002-2011).....Dean, College of Business Administration; Professor of Management
Neel, James W., Ph.D. (1963-1993) .................. Associate Dean, College of Sciences; Professor of Biology
Nelson, Kerry A., M.S. (1988-2012).............. Professor of Art, Design, and Art History Nelson, Sherwood M., Ph.D. (1956-1982)............................. Professor of Philosophy Nelson, Thomas A., Ph.D. (1968-2000)... $\qquad$ . Professor of English Nemirovsky, Richardo B., Ph.D. (2005-2016)..................... Professor of Mathematics Neuman, Donald R., Ph.D. (1967-1991)............................................................Counselor Neumann, Richard A., Ph.D. (1991-2017)................................. Professor of Education, Imperial Valley Campus
Neumeyer, Peter F., Ph.D. (1978-1993)..................................Professor of English and Newhoff, Marilyn, Ph.D. (2001-2016)......................... Professor of Speech, Language, and Hearing Sciences
Nichols, Alan C., Ph.D. (1964-2000).............. Professor of Communicative Disorders

Nichols-Bernhard, Jeanne F., Ph.D. (1985-2011)............... Professor of Exercise and Nutritional Sciences
Nieto, Jesus, Ph.D. (1989-2014)..................Associate Professor of Teacher Education Noble, Helen A., M.S. (1984-2019) ...................Lecturer in Mathematics and Statistics Noorany, Iraj, Ph.D. (1963-1997)... ..Professor of Civil and Environmental Engineering
Norman, Ronald J., Ph.D. (1985-2000) $\qquad$ Professor of Information and Decision Systems
Nosseir, Nagy S., Ph.D. (1983-2015)...................Professor of Aerospace Engineering Noto, James V., H.S.D. (1969-2001)................... Associate Professor of Public Health Novotny, Thomas E., M.D. (2009-2015).................................... Professor of Public Health Nower, Leon, Ph.D. (1963-1990)........Associate Professor of Mathematical Sciences Nunn, Melissa, M.A. (1979-2010).................................................................
[Senate Distinguished Professor]
Nye, William A., Ph.D. (1962-1996)..
 Professor of Finance O’Brien, Albert C., Ph.D. (1965-2000) ............................................. Professor of History O’Brien, Mary E., Ph.D. (1966-2000).......................... Associate Professor of Spanish Ochoa, Alberto M., Ed.D. (1975-2008).............................Professor of Policy Studies in Language and Cross-Cultural Education
OdendahI, Eric M., Ph.D. (1964-1992)................................................... O'Donnell, Terry L., D.M.A. (1975-2008)..................Professor of Music and Theatre, Television, and Film
Ofield, Jack, M.A. (1988-2009)................... Professor of Theatre, Television, and Film Ollman, Arthur L., M.F.A. (2006-2014) ............................. Professor of Art and Design Omberg, Edward, Ph.D. (1989-2006)......................................... Professor of Finance O'Neal, H. Edward, Ph.D. (1961-1994)..................................................essor of Chemistry [Senate Distinguished Professor] Olney, Marjorie F., Ph.D. (2002-2019).............................. Professor of Administration, Rehabilitation and Postsecondary Education Orth, Fredrick J., M.F.A. (1965-2001)......... Professor of Art, Design, and Art History Oseroff, Saul B., Ph.D. (1984-2008).... .Professor of Physics O'Shaughnessy, Tam E., Ph.D. (2002-2007)............................Associate Professor of Counseling and School Psychology
Osman, Ghada, Ph.D. (2002-2016). Professor of Arabic
Packard, Thomas R., D.S.W. (1983-2016)................................Professor of Social Work Palmer, Dennis, A.B. (1965-1997).................................Associate Professor of French Palsson, Gerald D., M.A. (1976-2003)..............................................Associate Librarian Pang, Valerie O., Ph.D. (1989-2019).............................Professor of Teacher Education Panos, Nicholas, M.S.E.E. $(1968-2001)$...............................Professor of Electrical and Computer Engineering
Paolini, Paul J., Jr. Ph.D. (1970-2003)..............................................Professor of Biology Papin, Patrick J., Ph.D. (1985-2016).....
(...a.a.a.a................................ ..Professor of Physics Parker, Richard A., Ph.D. (1985-2013) ....................................... Lecturer in Public Affairs Parsons, John A., Ph.D. (1965-1990) ... ....Professor of Biology
Patterson, Patricia, Ph.D. (1985-2012)
Professor of Exercise and Nutritional Sciences
Payne, William R., M.L.S. (2001-2018)..... Associate Librarian, SDSU Imperial Valley Pease, William J., M.A., M.L.S. (1973-1992)... .. Librarian Peddecord, K. Michael, Dr.P.H. (1981-2005)......................Professor of Public Health Pendleton, Wade C., Ph.D. (1969-2002)............................ Professor of Anthropology Penrose, John M., Ph.D. (1988-2016)................................. Professor of Management Information Systems
Perczel, Csilla F., Ph.D. (1970-1990).... $\qquad$ Associate Professor of Art Perkins, Michael J., M.B.A. (1986-2011)..

|  |
| :---: | Professor of Biology Peterman, Lewis E., Jr. Ph.D. (1978-2005) $\qquad$ Professor of Music

Peterson, Donald W., Ph.D. (1974-1992).
Associate Professor of Recreation, Parks and Tourism Peterson, Gary L., Ph.D. (1963-2007)......................Professor of Geological Sciences Phelps, Leroy N., Ph.D. (1966-1990)............................ Associate Professor of Biology Phleger, Charles F., Ph.D. (1971-2001).. Pierce, Stephen J., Ph.D. (1984-2004)... $\qquad$ ...Professor of Biology Pierucci, Mauro, Ph.D. (1979-2005)...................Professor of Aerospace Engineering and Engineering Mechanics
Piland, William E., Ed.D. (1987-2003)...... Professor of Administration, Rehabilitation and Postsecondary Education Piserchio, Robert J., Ph.D. (1966-2000) ........................................Professor of Physics Plice, Robert K., Ph.D. (2002-2014)....................Associate Professor of Management Information Systems
Plotnik, Rod, Ph.D. (1970-1999). $\qquad$ ..Professor of Psychology Plymale, Harry H., D.V.M. (1962-1991)......................... Associate Professor of Biology Pointer, Dennis D., Ph.D. (1991-2002). ......Professor of Public Health Polich, John L., Ph.D. (1969-1999).
$\qquad$ Associate Professor of History, Imperial Valley Campus

Polkinhorn, Harry, Ph.D. (1984-2014)....................................... Comparative Literature
Poole, Deborah, Ph.D. (1989-2015).................................................... Writing Studies and Linguistics
Popp, Dean O., Ph.D. (1969-2003)........Associate Vice President for Faculty Affairs; Professor of Economics
Poroy, Ibrahim I., Ph.D. (1967-1987)......................................................
Pozos, Robert S., Ph.D. (1994-2016)

|  |  |
| :---: | :---: | ...Professor of Biology

Preston, David L., Ph.D. (1971-2001)............................................Professor of Sociology
Price, Judy M., Ph.D. (1972-2008)..........................Associate Professor of Psychology
Pryde, Philip R., Ph.D. (1969-2001)...........................................Professor of Geography
Puerto, Cecilia, M.S. (1994-2011).............................................................................. Librarian
Pugh, Darrell L. (1981-2017)................................................................
Pumpian, Ian R., Ph.D. (1976-2019) ..................... Professor of Educational Leadership Quandahl, Ellen M., Ph.D. (1994-2016)......................Associate Professor of Rhetoric and Writing Studies
 Ramage, Jean C., Ph.D. (1975-1989)....................... Professor of Counselor Education Rankin, Janna S., J.D. (1986-1994)......... Professor of Recreation, Parks and Tourism Ratty, Frank J., Ph.D. (1954-1984)... $\qquad$ Professor of Biology
Ray, Eugene A., M.F.A. (1969-1996)......................................................Professor of Art Raymer, Paul H., M.S.W. (Under contract 1969-70; 1970-1995)......................... Assistant Professor of Social Work
Rea, Louis M., Ph.D. (1975-2012). $\qquad$ Professor of Public Affairs
Real, Michael R., Ph.D. (1980-2000). $\qquad$ Professor of Communication
Redding, Mary Worden, Ph.D. (1967-1983) .................Associate Professor of English and Comparative Literature
Redding, Robert W., Ph.D. (1966-1985) ......................Associate Professor of English and Comparative Literature
Reed, Richard C., Ed.D. (1984-2008)....................Assistant Dean for Student Affairs, College of Health and Human Services; Associate Professor of Nursing
Reed, Stephen K., Ph.D. (1988-2014)......................................Professor of Psychology
Reel, Jane E., Ph.D. (1958-1991) ................ Associate Professor of Teacher Education Reilly, Thomas F., D.P.A. (2008-2014)...................................... Professor of Social Work Reid, Nick W., M.F.A., M.A. (1983-2007)...................................... Professor of Theatre, Television, and Film
Reilly, Judy S., Ph.D. (1986-2011). $\qquad$ ................. $\qquad$ of Psychology
Reints, William W., Ph.D. (1966-1992) Professor of Finance
Rhyne, Lawrence C., Ph.D. (1987-2018)...........Associate Professor of Management
Richardson, Diana G., M.A. (1988-2018). $\qquad$ . Lecturer in Geography
Richardson, William H., Ph.D. (1963-1994)... $\qquad$ Professor of Chemistry
[Senate Distinguished Professor]
Riegel, Barbara Jean, D.N.Sc. (1984-2002, except F'87-S'95)........................ Professor of Nursing
Rigby, Ida K., Ph.D. (1976-2006)................... Professor of Art, Design, and Art History Riggins, L. Alan, M.S. (1999-2018)................................Lecturer in Computer Science Riley, Edward P., Ph.D. (1988-2015) .................................................Albert W. Johnson Distinguished Professor of Psychology
Rinehart, Robert R., Ph.D. (1964-1994)...
Ring, Morey A., Ph.D. (1962-1995). $\qquad$ .Professor of Biology
..Professor ofacational Technology
Rixman, Eunice E., D.M.A. (1960-1991)........................Professor of Teacher Education
Robasciotti, Carole A., M.S. (1980-2004)............Assistant Dean for Student Affairs, College of Professional Studies and Fine Arts; Lecturer in Exercise and Nutritional Sciences
Robbins, Stephen P., Ph.D. (1979-1993). $\qquad$ . Professor of Management ...Professor of Child and Family Development
Roberts-Fields, Gail C., M.A. (1976-2009) $\qquad$ Professor of Art, Design, and Art History
Robinett, Jane E., Ph.D. (1993-2010) ................. Associate Professor of Rhetoric and Writing Studies
Robinson, Gail L., Ph.D. (1989-2011)....................Professor of Spanish and Linguistics
Robinson, Linda, Ph.D. (2007-2014)... $\qquad$ .................... Professor of Nursing
Robinson-Zañartu, Carol A., Ph.D. (1980-2010).................. Professor of Counseling and School Psychology
Rockwell, Thomas K., Ph.D. (1983-2019) ................Professor of Geological Sciences Rodin, Miriam J., Ph.D. (1966-1999)........................................Professor of Psychology Rodriguez, Jose D., Ph.D. (1977-2007) .......................Associate Professor of Chicana and Chicano Studies
Roeder, Phoebe E., Ph.D. (1975-2014). $\qquad$ Lecturer and Coordinator, Liberal Studies and Natural Science Programs
Roeder, Stephen B.W., Ph.D. (1968-2010).. $\qquad$ .Professor of Chemistry Rogers, Gloria H., M.L.S., M.A. (1985-2003). $\qquad$ Associate Librarian

Rogers, John J., M.S. (1963-1996). $\qquad$
2003)....
$\cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots$ Professor of English and Rohrl, Vivian J., Ph.D. (1965-2001)...................................... Professor of Anthropology Rollefson, Gary O., Ph.D. (1984-1992)................................. Professor of Anthropology Romano, Albert, Ph.D. (1963-1990)..................... Professor of Mathematical Sciences Root, William A., M.S. (1998-2017)................................... Resident Software Specialist in Computer Science
Rosenstein, Leon, Ph.D. (1969-2003) ....................................... Professor of Philosophy
Ross, Pamela J., Ph.D. (1977-2008).............................Professor of Teacher Education
Rossett, Allison, Ed.D. (1977-2007)....................Professor of Educational Technology Rother, James, Ph.D. (1969-2003)............................................ Professor of English and Comparative Literature
Rushall, Brent S., Ph.D. (1985-2004)..................................... Professor of Exercise and Nutritional Sciences
Ryan, Richard W., Ph.D. (1982-2007)................................ Professor of Public Affairs, Imperial Valley Campus
Saarmann, Lembi, Ed.D. (1986-2011) ............................................ Professor of Nursing Saba, Farhad, Ph.D. (1984-2009)....................... Professor of Educational Technology Sabath, Michael J., Ph.D. (1993-2015)...............Associate Professor of Public Affairs, Imperial Valley Campus

Sacco, Steven J., Ph.D. (1997-2014) ................................................................
Saccuzzo, Dennis P., Ph.D., J.D. (1975-2011)..........................Professor of Psychology Sachdeva, Kanwal S., D.B.A. (1976-2004)................Associate Professor of Finance Salamon, Peter (1980-2015)................................................ Professor of Mathematics Salehizadeh, Mehdi, Ph.D. (1980-2017).........................................Professor of Finance
Sallis, James F., Jr. Ph.D. (1983-2012).... $\qquad$ Distinguished Professor of Psychology
Saltz, Daniel, Ph.D. (1959-1995)........................... Professor of Mathematical Sciences Salzer, Beeb, M.F.A. (1982-2008)...............Professor of Theatre, Television, and Film Samovar, Larry A., Ph.D. (1963-2000)............................. Professor of Communication Samuelson, Richard A., Ph.D. (1973-2000) $\qquad$ .Professor of Accountancy
Sandback, Patricia R., M.F.A. (1974-2010)...................................... Professor of Dance

Sanders, Frederick C., Ph.D. (1967-1981)..................................Associate Professor of Speech Communication
Sandlin, Joann S., Ph.D. (1967-1994)......................................... Professor of Sociology
Santa Cruz, Rafaela M., Ph.D. (1980-2017).................................... Associate Professor of Teacher Education
Sattler, Jerome M., Ph.D. (1965-1994).. $\qquad$ Professor of Psychology
Savage, Stephen M., M.M., M.L.S. (2003-2019) ...............................................Librarian
Savvas, Minas, Ph.D. (1968-2001)........................................... Professor of English and Comparative Literature
Scheck, Dennis C., Ph.D. (1968-2001) ....................................... Professor of Sociology
Schorr, James L., Ph.D. (1983-2015)..........................................................
Schreiber, Loren P., M.F.A. (1994-2015).........................................Professor of Theatre, Television, and Film
Schulte, Richard H., Ph.D. (1965-2002).................................Professor of Psychology Schultze, William A., Ph.D. (1968-2000) ........................Professor of Political Science Schulze, Rolf H.K., Ph.D. (1969-1998)........................................ Professor of Sociology Sciglimpaglia, Don, Ph.D. (1977-2009)..................................... Professor of Marketing Scollay, Patricia A., Ph.D. (1972-2002)..................Associate Professor of Psychology Scott, Bonnie K., Ph.D. (2001-2011)................................Professor of Women's Studies
Scott, Carole A., Ph.D. (1969-2001).............................Dean, Undergraduate Studies; Professor of English
Scutchfield, F. Douglas, M.D. (1980-1997)............................Professor of Public Health
Sebold, Frederick D., Ph.D. (1969-1987).................................. Professor of Economics

Seidman, Robert L., Ph.D. (1981-2013).............. Associate Professor of Public Health
Seitz, Michael R., Ph.D. (1985-2004) ......................... Professor of Speech, Language, and Hearing Sciences
Selder, Dennis J., Ph.D. (1968-2000) ................Professor of Exercise and Nutritional Sciences
Senn, Karen L., Ed.D., M.P.H. (1977-2002)............................
Senour, Maria Nieto, Ph.D. (1977-2009).. $\qquad$ and School Psychology [Senate Distinguished Professor]
Seright, Orin D., Ph.D. (1967-1997)... ...Associate Professor of Linguistics Settle, Robert B., Ph.D. (1972-1988) .......................................... Professor of Marketing Sevier, E. Dale (2000-2013) .......................................... Professor of Regulatory Affairs Shackelford, Gordon L., M.S. (1975-2004) ........................................Lecturer in Physics Shafter, Allen W., Ph.D. (1989-2018) ... $\qquad$ .. Professor of Astronomy Shapiro, Joseph B., Ed.D. (2001-2017) ...............Dean, College of Extended Studies Shapiro, Lewis P., Ph.D. (1995-2016).......................... Professor of Speech, Language, and Hearing Sciences

Shapovalov, Veronica, Ph.D. (1988-2019). Sharabi, M. Nazmi, Ph.D. (1981-2004)... $\qquad$ Associate Professor of Civ and Environmental Engineering Sharpe, David M., Ed.D. (1977-2004)..................... Director, Instructional Technology Services; Senior Vocational Instructor
Shaw, Larry J., Ed.D. (1968-2001).................................Professor of Teacher Education Sheldon, John M., Ed.D. (1962-1997)................................................... Professor of Music Shepard, David C., Ph.D. (1956-1991)................................................. Professor of Biology Sheres, Ita G., Ph.D. (1971-2001)................................................Professor of English and Comparative Literature
Sherr, Steven D., Ph.D. (1969-2003). $\qquad$ Counselor
Sherrard, William R., Ph.D. (1968-2000) ........................ Professor of Information and Decision Systems
Shields, Allan E., Ph.D. (1949-1977, except 1969-1970)............ Professor of Philosophy Shillington, Audrey M., Ph.D. (1997-2012)................................Professor of Social Work Shirk, Helen Z., M.F.A. (1976-2005) ........................................ Professor of Art, Design, and Art History
Shively, Martha J., Ph.D. (1978-2003).............................................Professor of Nursing Shojai, Donald A., Ph.D. (1971-2002)......................................... Professor of English and Comparative Literature
Shore, Herbert B., Ph.D. (1975-2002)...............................................................
Shore, Lynn M., Ph.D. (2004-2013) $\qquad$ Professor of Management Short, Donald R., Jr. Ph.D. (1969-2001).......................Professor of Mathematical and Computer Sciences
Short, James L., Ph.D. (1973-2003). Shutts, William H., Ph.D. (1958-1977).. $\qquad$ Professor of Aerospace En Siman, Alan E., Ph.D. (1974-2002) ..........................Associate Professor of Social Work Simas, Rick A., Ph.D. (1992-2014)...................Lecturer in Theatre, Television, and Film Simmons, Roger W., Ph.D. (1976-2011). $\qquad$ .Professor of Exercise and Nutritional Sciences
Simpson, Michael G., Ph.D. (1986-2015).....................................Professor of Biology Singer, Ethan A., Ph.D. (1979-2013) ...............Associate Vice President for Academic Affairs; Professor of Business Administration and Public Affairs Singh, Gangaram, Ph.D. (1999-2014).. $\qquad$ Professor of Management
Skaar, Donald L., M.S. $(1960-1981)$........................................ Professor of Electrical and
Computer Engineering
Skaar, Donald L., M.S. $(1960-1981)$........................................ Professor of Electrical and
Computer Engineering
Skwara, Erich W., Ph.D. (1986-2010).................Professor of Humanities and German Sleet, David A., Ph.D. (1974-1997)....................................................

Nutritional Sciences and Health Science Slymen, Donald J., Ph.D. (1988-2011)....................................Professor of Public Health Smith, Charles D., Jr. Ph.D. (1967-1992)... $\qquad$ (970)................ .............................fssistant Vice President for Academic Services, Academic Affair ... Therapist, Counseling and
Smith, Linda D., Ph.D. (1996-2013) .................................... Therapist, Counseling and
Smith, Newton B., Ph.D. (1954-1986) ................. Professor of Mathematical Sciences Smith, Ray T., Jr. Ph.D. (1964-1996) .................................................Professor of History Snavely, William B., Ph.D. (2007-2017)............................ Professor of Communication Song, Moon H., Ph.D. (1988-2017).................................................................. Sonntag, Iliana L., M.L.S., M.A. (1980-1991)..................................................... Librarian Sorochan, Walter D., H.S.D. (1969-1991).......................... Professor of Health Science Soule, John W., Ph.D. (1970-2001)................................... Professor of Political Science
Sowder, Judith T., Ph.D. (1986-2000)...........................Professor of Mathematical and Computer Sciences
Sowder, Larry K., Ph.D. (1986-2003). $\qquad$ Professor of Mathematics
Sparks, Irving Alan, Ph.D. (1974-1999).. $\qquad$ .. Professor of Religious Studies Sparrow, Glen W., Ph.D. (1980-2001) ......................Professor of Public Administration and Urban Studies
Spevak, Joseph E., Ph.D. (1969-2006).......... Assistant Professor of Communication Spindler, Audrey A., Ph.D. (1977-2007)... $\qquad$ .Professor of Exercise and Nutritional Sciences
Spinetta, John J., Ph.D. (1972-2003)........................................Professor of Psychology [Senate Distinguished Professor]
Spitzberg, Brian H., Ph.D. (1989-2018)...........................Professor of Communication [Senate Distinguished Professor] Albert W. Johnson Distinguished Professor of Social Work
Starr, Raymond G., Ph.D. (1964-1999)........................................................... Stauffer, Thomas David, M.A. (1984-2008)................................... Professor of Music Stautland, Sigurd, Ph.D. (1966-1991)........................... Professor of Teacher Education Steinberg, Dan, Ph.D. (1989-1998)..........................Associate Professor of Economics Stephenson, III, John S., Ph.D. (1969-1986).............................. Professor of Sociology Sterk, William E., Ph.D. (1978-2011)... $\qquad$ ...Professor of Finance
Stevens, Larry P., Ed.D. (1986-1991)..................Assistant Professor of Administration, Rehabilitation and Postsecondary Education

Stewart, Charles J., Ph.D. (1955-1992) ..................................... Professor of Chemistry Stewart, Douglas B., Ph.D. (1971-2001).................................... Professor of Economics Stewart, Kris W., Ph.D. (1984-2013)............................. Professor of Computer Science Stichler, Jaynelle F., D.N.Sc. (2006-2012).................................... Professor of Nursing Stites, Francis N., Ph.D. (1968-2000) ............................................... Professor of History [Senate Distinguished Professor]
Stock, Robert L., Ph.D. (1975-2012).....................Associate Professor of Public Affairs Stoddart, Jess L., Ph.D. (1966-1998)................................................................ Stow, Douglas A., Ph.D. (1983-2019) .......................Albert W. Johnson Distinguished Professor of Geography
Strand, Paul J., Ph.D. (1977-2004)........................................ Professor of Political Science
Stratton, Frank E., Ph.D., (1966-1997)... $\qquad$ .Professor of Civil and
Environmental Engineering
Streshly, William A., Ph.D. (1990-2000)............................Professor of Administration, Rehabilitation and Postsecondary Education
Strom, David W., Ed.D. (1968-2005) ...........................Professor of Teacher Education Stuart, Robert J., Ph.D. (1969-1987) ................................................. Computer Engineering
Stumph, William E., Ph.D. (1983-2012)..... Professor of Chemistry and Biochemistry Stutz, Frederick P., Ph.D. (1970-2004).......................................Professor of Geography Sucato, Vincent, Ph.D. (1974-2003)........................Assistant Professor of Social Work Sucec, Anthony A., Ed.D. (1967-2001).................................. Professor of Exercise and Nutritional Sciences
Sullivan, Patrick, M.L.I.S. (2000-2012) $\qquad$ ..Associate Librarian
Sutton, L. Paul, Ph.D. (1981-2011)....
....... . Professor of Public Affairs Sweedler, Alan R., Ph.D. (1980-2018).. $\qquad$ Associate Vice President, Academic Affairs, International Programs; Professor of Physics Sweedler-Brown, Carol O., Ph.D. (1975-2005)..........................Professor of Rhetoric and Writing Studies
Sweeney, Nancy M., D.N.Sc. (1999-2007).................Associate Professor of Nursing Szeto, Andrew Y.J., Ph.D. (1983-2017). Professor of Electrical and Computer Engineering
Talamantes, Florence W., Ph.D. (1962-1992)........... Associate Professor of Spanish Talbert, Freddie D., Ph.D. (1968-2002).................Associate Professor of Astronomy Tarokh, Mahmoud, Ph.D. (1990-2019)........................Professor of Computer Science Terry-Guyer, Linda L., Ed.D. (1990-2007)...
 Counseling and School Psychology Thal, Donna J., Ph.D. (1990-2006) .............................Albert W. Johnson Distinguished Professor of Speech, Language, and Hearing Sciences
Thayer, Mark A., Ph.D. (1981-2010)......................................... Professor of Economics Thile, Edmund L., Ph.D. (1967-1998).............. Professor of Communicative Disorders Thompson, Patrick W., Ed.D. (1990-1999).......................... Professor of Mathematical and Computer Sciences
Thorbjarnarson, Kathryn W., Ph.D. (1991-2016)...........................Associate Professor of Geological Sciences
Thyagarajan, Kadayam S., Doctorate of Engineering (1980-1999)........ Professor of Electrical and Computer Engineering
Todero, Catherine M., Ph.D. (2006-2012).............................................. Toole, Howard R., Ph.D. (1972-2005) .......................................... Tran, My Luong, Ph.D. (1981-2006)..........Associate Professor of Teacher Education Treadway, Gerald H., Jr. Ed.D. (1970-2006)..............Professor of Teacher Education Troxell, Eugene A., Ph.D. (1966-2000)..................Associate Professor of Philosophy Tsoukas, Constantine D., Ph.D. (1986-2013). ...Professor of Biology Tummala, R. Lal, Ph.D. (2002-2016) ......................................Professor of Electrical and Computer Engineering
Turner, Marjorie S., Ph.D. (1954-1977).................................... Professor of Economics Turhollow, C. Anne, M.L.S. (1982-2013).............................................................Librarian Tyagi, Pradeep K., Ph.D. (1982-2012)....................................... Professor of Marketing Uline, Cynthia L., Ph.D. (2005-2014)................. Professor of Educational Leadership Vails-Weber, Dorothy V., M.A. (1970-1998).....................................................Counselor Valle, Juan Ramon, Ph.D. (1974-1996) ......................................... Vandenberg, Pieter A., D.B.A. (1969-2004).................................Professor of Finance Vanderbilt, Kermit, Ph.D. (1962-1988)................................................ Comparative Literature [Senate Distinguished Professor] Van de Wetering, R. Lee, Ph.D. (1960-1992)... Professor of Mathematical Sciences Vanier, Dinoo T., Ph.D. (1970-1998)..... $\qquad$ .... Professor of Marketing Van Sickle, Douglas J., Ph.D. (1978-2004)............................Director, Counseling and Psychological Services, Student Affairs; Counselor Van Steenbergen, James F., Ph.D. (1970-1993)..........................Professor of Biology Varela-lbarra, José L., Ph.D. (1976-1991)...................Associate Professor of Spanish, Imperial Valley Campus
Vartanian, Pershing, Ph.D. (1968-2001). $\qquad$ ..Professor of History Venable, Carol F., Ph.D. (1987-2010). $\qquad$ Professor of Accountancy Venieris, Yiannis P., Ph.D. (1967-1998). Professor of Economics Verderber, Anne, Ph.D. (1971-1992).. $\qquad$ Associate Professor of Nursing

## Emeritus Faculty

Vergani, GianAngelo, Dottorato in Lettere (1963-1992) ............ Professor of Italian Verity, Larry S., Ph.D. (1984-2019) ...........................Associate Dean, College of Health and Human Services; Professor of Exercise and Nutritional Sciences Verzi, Diana, Ph.D. (2001-2017) $\qquad$ Professor of Mathematics, Imperial Valley Campus
Vik, Gretchen N., Ph.D. (1975-2009). $\qquad$ Professor of Information and Decision Systems
Villarino, José R., Ph.D. (1969-2001).......Professor of Chicana and Chicano Studies Vinge, Vernor S., Ph.D. (1972-2000) $\qquad$ Associate Professor of Mathematical and Computer Sciences
Voigt, Greg, M.A. (1996-2016)...............Lecturer in Exercise and Nutritional Sciences Vuskovic, Marko I., Ph.D. (1986-2010) .......................... Professor of Computer Science Wahl, Patricia R., Ph.D. (1990-2006)................................................. Professor of Nursing Walker, Carolyn L., Ph.D. (1986-2010) $\qquad$ .Professor of Nursing
Wall, Carey G., Ph.D. (1971-2002) $\qquad$ Professor of English
Wallace, Robert D., Litt. D. (1957-1986). $\qquad$ Professor of Art
Wallace, William J., Ph.D. (1969-2001)...........................................Associate Professor of Geological Sciences and Physics Wang, Kuo Chang, Ph.D. (1980-1999)...............Professor of Aerospace Engineering and Engineering Mechanics
Warburton, John T., Ed.D. (1968-1982)..............................................Associate Professor of Educational Administration
Warren, Edward W., Ph.D. (1963-1990)............Professor of Philosophy and Classics Warschauer, Thomas, M.D., Ph.D. (1977-2005)... $\qquad$ .Professor of Finance

Watson, Lawrence C., Ph.D. (1967-1992)............................. Professor of Anthropology Watson, Maria-Barbara, Ph.D. (1976-2003).................Professor of Women's Studies Wauchope, Mary M., Ph.D. (1989-2015) ...................... Associate Professor of German Webb, Charles R., Ph.D. (1949-1972, except 1965). $\qquad$ Professor of History
Webb, Charlotte, Ph.D. (1975-2004)........................Associate Professor of Linguistics Weber, Shirley N., Ph.D. (1972-2010) ................................. Professor of Africana Studies Wedberg, Hale L., Ph.D. (1959-1983).. $\qquad$ Professor of Botany
Weeks, John R., Ph.D. (1974-2013)..............................Albert W. Johnson Distinguished Professor of Geography
Weinberg, Marsha, M.A. (1994-2011). $\qquad$ Therapist, Counseling and Psychological Services
Weiner, Michael A., Ph.D. (2000-2005) .....................Professor of Asia Pacific Studies Weissman, Stanley N., Ph.D. (1962-1991)................................... Professor of Philosophy Wells, Richard W., M.A. (1961-1994)......... Associate Professor of Physical Education Westermo, Bruce D., Ph.D. (1980-2015) ............ Professor of Civil, Construction, and Environmental Engineering
Weston, Thomas S., Ph.D. (1974-2014)........................................ Professor of Philosophy
White, Phillip M., M.L.S. (1985-2011)... $\qquad$ .Librarian
Whitman, David G., Ph.D. (1969-2001) ..............Associate Professor of Mathematical and Computer Sciences
Whitney, Dan, Ph.D., J.D. (1966-2000)................................. Professor of Anthropology Whittington, O. Ray, Ph.D. (1978-1999) ...................................Professor of Accountancy Wilbur, Robert W., Ph.D. (1974-2004)............... Associate Dean for Academic Affairs, College of Business Administration; Associate Professor of Finance
Williams, Diane R., M.A. (1975-2002)............................................Associate Professor of Communicative Disorders
Williams, Kathy S., Ph.D. (1987-2017)...................................................Professor of Biology
Williams, Stephen J., Sc.D. (1980-2014) ......Associate Dean, College of Health and Human Services; Professor of Public Health
Williamson, Gloria R., M.A. (1961-1979). $\square$ Associate Professor of Physical Education
Williamson, James E., Ph.D. (1968-2002)..............................Professor of Accountancy Willis, George C., M.F.A. (1967-2001)...............................Associate Professor of Dance Willis, Winnie O., Sc.D. (1984-2004).........................................Professor of Public Health Wilson, Carole, M.L.S. (1981-2003).......................................................Associate Librarian Wilson, Patricia A., D.P.A. (1990-2007)...................Professor of Public Administration and Urban Studies
Winslow, Robert W., Ph.D. (1965-2000) $\qquad$ Professor of Sociology
Wolf, R. Craig, M.F.A. (1987-2010)..............Professor of Theatre, Television, and Film Wolter, Gerhard H., M.S. (1957-1975)..................................................Professor of Physics Wong, Paul, Ph.D. (2003-2015) .................................. Dean, College of Arts and Letters Woo, Catherine Yi-yu Cho, Ed.D. (1970-1997). $\qquad$ ..Albert W. Johnson Distinguished Professor of Chinese [Senate Distinguished Professor]
Woodruff, Susan I., Ph.D. (2008-2018). $\qquad$ ...Professor of Social Work Woodson, John H., Ph.D. (1961-1998) $\qquad$ Professor of Chemistry

Wotruba, Thomas R., Ph.D. (1962-2000).................................... Professor of Marketing Wozniak, Dolores A., Ed.D. (1976-2004)..........................Dean, College of Health and Human Services; Professor of Nursing
Wright, Penny L., Ph.D. (1972-2002).. $\qquad$ essor of Management
Wright, Richard D., Ph.D. (1964-2002).. .Professor of Geography
Wulfemeyer, K. Tim, Ed.D. (1976-1980 and 1987-2013)............Professor of Journalism and Media Studies

Yerkes, Diane M., Ed.D. (1999-2001).............. Associate Professor of Administration, Rehabilitation and Postsecondary Education
Young, Ronald R., Ph.D. (1971-2003).............................. Associate Professor of Spanish Zedler, Joy B., Ph.D. (1972-1998) .. Professor of Biology
Zedler, Paul H., Ph.D. (1969-1998).. $\qquad$ ....Professor of Biology
Zhang, Sheldon X., Ph.D. (2002-2016) $\qquad$ Professor of Sociology Zimmerman, Bonnie S., Ph.D. (1978-2010)...................... Associate Vice President for Faculty Affairs; Professor of Women's Studies
Zozakiewicz, Catherine, Ph.D. (2003-2014) ...............................Associate Professor of Teacher Education
Zyskind, Judith W., Ph.D. (1982-2002) Professor of Biology

## 2019-2020 Lecturers

Abassi, Shogofa, M.A. Women's Studies
 Abrecht, Kristi L, M.A...........................................................................Women's Studies
Acio, Breanne C., B.A. $\qquad$

| A. |  |
| :---: | :---: | .Communication

Adams, Charlotte M., M.A................................................................Teacher Education
Aganza, Joaquin S., M.S......................................Counseling and School Psychology
Aguinaldo, Arnel L., M.A.......................................Exercise and Nutritional Sciences
Abassi, Shogofa, M.A...
 Women's Studies
Abdalla, Marwa I., M.A...
D. ............ $\qquad$ Management Information Systems
Abman, Zamira Y., Ph.D................................................... College of Arts and Letters; History
Aboelkassem, Yasser, Ph.D............................................. Mechanical Engineering Abrecht, Kristi L., M.A....... $\qquad$ Women's Studies
Adams, Charlotte M., M.A........................................................... Teacher Education Aganza, Joaquin S., M.S................................. Counseling and School Psychology Aguinaldo, Arnel L., M.A..................................... Exercise and Nutritional Sciences Akbulut, Sumeyye Z., Ph.D.......................................................... Religious Studies Al Ajrawi, Shams..............................................Electrical and Computer Engineering Alfaro, Victor C., M.A. ....................................................... College of Arts and Letters Alicio, Atilio V., Ph.D.................... Linguistics and Asian/Middle Eastern Languages Alipanah, Neda, Ph.D... Computer Science
Allen, Aida D., M.A...
$\qquad$ Educational Leadership; Teacher Education
Allen, Isaac, M.M. ... Music and Dance
Allnutt, Stephen B., M.S... Women's Swimming
Alnuaimi, Amer A., Ph.D......... Civil, Construction, and Environmental Engineering Alvarado, Christopher, M.S.................................................... SDSU Imperial Valley Amack, Andrew S., M.S................................... Electrical and Computer Engineering Amavisca, Jason C., J.D....................................................... SDSU Imperial Valley Amen, Sameh L., M.S.............. Civil, Construction, and Environmental Engineering Amon, Maria P., Ph.D................................................... Theatre, Television, and Film Anastasia, Desire J., M.S................................................................... Public Affairs
Anaya, Amber E., M.A.............................................. Rhetoric and Writing Studies
Anderholt, Louie B., J.D. ........................................................... SDSU Imperial Valley Anderson, Iris V., M.A................................................................ Teacher Education Anderson, Karen V., M.S.N................................................................................ Nursing Anderson, Mark C., M.F.A.......................................... Theatre, Television, and Film Andreev, Andrei, M.B.A................................................................................... Finance Andres, Steven G., M.S................................................................. College of Sciences; Management Information Systems
Andres, Trudi L., M.A........................................................................... Anthropology

Andrews, Mary Ellen M., M.S. ....................................................... Special Education Antonucci, Cristina M., Psy.D.................... Counseling and Psychological Services Aposhian, Daniel A., M.A..... $\qquad$ Teacher Education
Applegate, Lauren J., D. Art............................................. Spanish and Portuguese Arab, Bahareh Sadat, Ph.D....................................................... Computer Science Arellano, Maria R., M.S......................................... Exercise and Nutritional Sciences Armas, Anthony P., M.A................................................... Mathematics and Statistics Armor, David A., Ph.D.................................................................................... Psychology Armstead, Rulette V., M.A.................................................................. Public Affairs Armstrong, Matthew D., B.A. Arnold, Kenneth D., B.S.E.E. ......................... Electrical and Computer Engineering Ashworth, Steven D., Ph.D.................................................................. Management
Asim, Tishna M., J.D......................................... English and Comparative Literature
Aste, Marian, M.S.......................... Dual Language and English Learner Education; Teacher Education
Aste-Nieto, Andina, B.A. Special Education

Austin, Naida, J.D...................................................................................... Management
Averilla, Jason M., D.P.T..................................... Exercise and Nutritional Sciences
Avner, Robin S., Ph.D................................................... Rhetoric and Writing Studies
Ayala, Ricardo, M.S. ............................................................ Mechanical Engineering
Ayres, Michelle E., D. Art ...
Azmoun, Janet L., B.A.
A........................................................ Mathematics and Statistics

Bachman, Gail, D.P.T............................................ Exercise and Nutritional Sciences Bacon, Daniel, M.A.................................................. Child and Family Development






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| :---: | :---: |
|  |  |
|  |  |
| Gomez, Diana, M.A. ................... Dual Language and English Learner Education |  |
| Gomez, Guillermo A., Ph.D.......... Dual Language and English Learner Education |  |
| Gomez Salas, Oscar A., B.S....................................................................... Biology |  |
| Gonda, Susan, Ph.D. $\qquad$ Women's Studies |  |
| Gonzalez, Jon R., M.S. | ursing |
| Gonzalez, Maria R., M.A............................................ Spanish and Portuguese |  |
| Gonzalez Ojeda, Alejandro, M.A.................................... Educational Leadership |  |
| Goodman, Rhonda K., M.A.................................... Rhetoric and Writing Studies |  |
| Goodwiler, Carrie B., M.A.................. Speech, Language, and Hearing Sciences |  |
| Gopalakrishnan, Chitra, M.F.A....................................................... Art and Design |  |
| Gordon, Robert L., M.A. ..................................................................... Economics |  |
| Gottschalk, Andrea, M.S. Counseling and School Psychology |  |
| Graham, Julie-Kathryn E., Ph.D. $\qquad$ Nursing |  |
| Graham, Matthew R., Ph.D. $\qquad$ Mechanical Engineering |  |
| Grajeda, Oscar J., Ed.S. Counseling and School Psychology <br> Grande, Kelly A., M.Ed. <br> Public Health |  |
|  |  |
| Grant, Judy G., B.S............................................................. SDSU Imperial Valley |  |
|  |  |
|  |  |
| Greb, Gregory A., Ph.D................................................................... Political Science |  |
| Greenbaum, Alexander M., M.A. $\qquad$ Music and Dance Greenberg Sue K B S Hospitality and Tourism Management |  |
|  |  |
| Greene, Melanie A., M.A....................................................... Women's Volleyball |  |
| Greenwood, Diane L., M.S.N................................................................... Nursing |  |
| Greicar, Margo B., Ed.D. .................................... Exercise and Nutritional Sciences |  |
| Greiner, Lydia H., M.S.N........................................................ SDSU Imperial Valley |  |
| Grettenberger, Erin K., M.Ed.................................................... Special Education |  |
| Gretz, Suzanne C., M.A........................................................ SDSU Imperial Valley |  |
| Griggs, Chassion W., M.S................................................................. Women's Soccer |  |
|  |  |
|  |  |
| Grimm, Elizabeth A., M.A....................................................... Teacher Education |  |
| Grinnell-Wilson, Laurel A., M.A............................................... Music and Dance |  |
| Groza, Adriana, M.A. .......................................... Rhetoric and Writing Studies |  |
| Grundon, Gretchen S., M.A...................................................... Special Education |  |
| Guenther, Corinna R., M.A. <br> Anthropology <br> Guo, Chunhui, Ph.D. Computer Science |  |
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| Guralp, Genco, Ph.D...................................................................... Philosophy |  |
| Gusman, Jennifer J., M.A............................... Counseling and School Psychology |  |
| Guthrie, Mary C., Ph.D. English and Comparative Literature Gutierrez, Gabriel, Ph.D. Counseling and School Psychology |  |
|  |  |
| Guzman, Christine, M.A.......................................................... European Studies |  |
| Guzman, Roberto, M.A........................................ College of Arts and Letters |  |
| Haddock, Lisa C., Ph.D. ......................................................................... Marketing |  |
|  |  |
| Hagan, Virginia L., Ed.D......................................................... Teacher Education |  |
| Hall, Joshua J., M.A............................................... Rhetoric and Writing Studies |  |
| Hall, Matthew I., B.A.......................................................................... Men's Soccer |  |
| Hallett, Melodie J., Ph.D. .................................................................... Sociology |  |
| Hanan, Barry B., Ph.D....................................................... Geological Sciences |  |
| Harn, Jay C., M.A. $\qquad$ Journalism and Media Studies |  |
| Harper, Alison R., D.P.T...................................... Exercise and Nutritional Sciences |  |
| Harrington, Don L., J.D. <br> Finance |  |
| Harris, Bonnie M., Ph.D. .......................................................................... History |  |
| Hartford, Gerald D., B.S. Mechanical Engineering |  |
| Hassing, Desmond M., M.A. American Indian Studies |  |
| Hatrak, Marla L., M.S.................... Dual Language and English Learner Education |  |
| Haughey, James R., M.B.A... Civil, Construction, and Environmental Engineering |  |
| Haywood, Jerome R., B.A. ............................................................. Men's Football |  |
| Hazel, Monika, M.A. Special Education <br> Healey, Shawn J., B.S. Computer Science |  |
|  |  |
| Heim, Sara K., M.S.N..................................................................... Nursing |  |
| Heiser, Jerrod A., B.A................ Linguistics and Asian/Middle Eastern Languages |  |
| Heiss, Amy L., M.S.N. Nursing <br> Helmer, John R., Psy.D. Counseling and Psychological Services |  |
|  |  |
| Hemati, Hossein, M.S. ............ Civil, Construction, and Environmental Engineering |  |
| Hemmens, Jason W., M.S......................... Hospitality and Tourism Management |  |
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Jordan, Robert A., M.A.
Theatre, Television, and Film

Joyce, Ginger L., M.S.
Juan, Michael A., Ph.D.
$\qquad$ D........... Juan Nacu, Mary Joyce D., Ph.D Juarez Lemus, Ivet G., M.S.W.. Judd, David B., M.A.
Judge, Robert A., Ph.D.
$\qquad$ Jullié, Emily R., B.A. Jun, Grace S., Ph.D.
Justice, Paul W., M.A.

Special Education .. Counseling and Psychological Services Counseling and Psychological Services SDSU Imperial Valley Rhetoric and Writing Studies Management Information Systems ..... Dual Language and English Learner Education .. Music and Dance
Division of Academic Engagement and Student Achievement; Linguistics and Asian/Middle Eastern Languages
Kacsinta, Apollo D., Ph.D.......................................................................... Biology Kading, Silvia, M.A............................................................................ European Studies Kaffenberger, Schorsch L., M.A. .................................................................... History Kahn, Sarah Z., M.A. ........................................... Counseling and School Psychology Kang, In S., M.A........................... Linguistics and Asian/Middle Eastern Languages Kartalija, Michael A., Ph.D. ......................................................................... Marketing Kasendorf, Stacey J., M.A......................................................... Special Education Katzman, Jodi S., M.S.N....................................................................................... Nursing
Kaupp, Mark A., D.Psy....................................... Counseling and School Psychology Kaveh, Parisa, Ph.D........................................ Electrical and Computer Engineering Keeney, Adrianne J., Ph.D................................................... SDSU Imperial Valley; Social Work
Keith, Carolyn J., M.A..................................................... Theatre, Television, and Film Keith, Jessica, M.A., M.Ed. .............. College of Professional Studies and Fine Arts Keller Lapp, Heidi M., Ph.D. History
Kelliher, Joseph P., M.A...................................................... Spanish and Portuguese Kellman, Wendi A., M.S.......................................... Child and Family Development Kelly, Karen R., Ph.D.............................................. Exercise and Nutritional Sciences Kendricks, Ethan N., M.A................................................................ Art and Design
Kennedy, John P., B.S................................... Electrical and Computer Engineering Kent, Nicole M., Ph.D................................................. Child and Family Development Kerford, Chelsea A., B.A.............................................. Rhetoric and Writing Studies Kershaw, Alexander H., M.A................................................................... Art and Design
Ketchum, Monica D., M.A.......................................................... SDSU Imperial Valley
Khaleghi, Mohsen, B.S................................. Hospitality and Tourism Management

Killmer, Jocelyn E., M.A........................................................................ Anthropology; Asian and Pacific Studies
Kim, Andy J., Ed.D............................................ Counseling and School Psychology
Kim, Chong T., Ph.D.
Counseling and School Psychology
Kim, Helen H., M.A. ................... Linguistics and Asian/Middle Eastern Languages
Kim, Nahae K., Ph.D............................ Speech, Language, and Hearing Sciences
Kim, Raymond N., M.B.A................................................................................ Finance
Kimbrell, Patricia A., M.A.................................. Exercise and Nutritional Sciences
King, Kimberly D., M.B.A....................................................................... Management
King, Sanna T., M.A................................................................................. Public Affairs
Kinkade, Martha E., M.F.A......................................... Rhetoric and Writing Studies
Kirkegaard, Bradford A., M.A........................................................... Religious Studies
Kirsch, Christine L., Au.D..................... Speech, Language, and Hearing Sciences
Kirshner, Lev Y., B.A................................................................................. Men's Soccer

Klass, Steven T., M.A....................................................... Mathematics and Statistics
Klausing, Mona, M.S........................................ Counseling and School Psychology
Kline, Karl A., M.F.A......................................................... Rhetoric and Writing Studies
Kobari, Sam D., M.A...
Koenig, Roman S., M.A.
Kofford, Bret M., M.A.
$\qquad$ Journalism and Media Studies

## Kofford, Sandra L., Ed.D.

$\qquad$ SDSU Imperial Valley SDSU Imperial Valley
Kolman, Scott J., M.B.A. Economics;

Koo, Rebecca S., M.S............................................... Child and Family Development Koss, Karen C., B.A....................................................... Rhetoric and Writing Studies
Kovats, Ana G., M.A...................................................... Chicana and Chicano Studies Kraft, Heidi S., Ph.D......................................................................................... Psychology Kraft, Patricia L., M.S..................................................................... Computer Science Kroener, Julienne P., M.A....................................................... Educational Leadership Kropp, Jeremiah N., D.Psy......................... Counseling and Psychological Services Kruming, Martin A., J.D...........................................................
Kucera, Josef P., B.A.
Kuhlken, Pamela F., Ph.D. ................................................. Classics and Humanities; ... Music and Dance Religious Studies



Macchione, Nicola N., M.P.H. .................................................................. Public Health
Macias Georgina M. A Spanish and Portugue

Mahdavi-Izadi, Farid, Ph.D.................................................................................. History
Maheronnaghsh, Sarah G., Ph.D. .................. Dual Language and English Learner $\begin{array}{r}\text { Education }\end{array}$
Maldonado, Magda E., M.A......... Dual Language and English Learner Education
Manalansan, Jake Q., B.A............................................................................ Philosophy
Manju Muralidharan Priya, Fnu, M.S........................................... Computer Science
Manley, Peter J., M.F.A.............................................. Rhetoric and Writing Studies
Manyak, Kristin A., B.S......................................... Exercise and Nutritional Sciences

Mark, Brian M., M.A.................... Linguistics and Asian/Middle Eastern Languages
M
Marquez, Tania Y., M.A................. Dual Language and English Learner Education
Marshall, Meagan E., M.F.A............................ English and Comparative Literature
Martin, Estralita M., Ph.D............................................................. College of Sciences,
Student Affairs
Martin, Nelle D., B.F.A........................................................................... Art and Design
Martin, Richard C., Ph.D.............................................................. SDSU Imperial Valley
Martinez, David, Ed.S. ........................................ Counseling and School Psychology
Martinez, Mario, Ed.D. ........................................................... SDSU Imperial Valley
Marty, Kevin G., M.S...
$\qquad$ ......... Social Work
Massey, Anna B., M.F.A...................................................................... Music and Dance
Matas, Amanda K., Ph.D............... Dual Language and English Learner Education; $\begin{array}{r}\text { Teacher Education }\end{array}$
Mateo, Clara M., B.S...................................................... Mathematics and Statistics

Mays, Jennifer A., M.S........................................................................ Special Education McDaniel, Sara L., M.A................................................................ Special Education

McHan, Michael J., M.A. ........................................................................ Communication
McLaughlin, Kevan P., J.D........................................................................ Accountancy
McRae, Paul A., M.A............................ Speech, Language, and Hearing Sciences
McVicker, Brian J., M.F.A................................................ Theatre, Television, and Film
Meader, David K., Ph.D.................................... Management Information Systems
Meagher, Alison C., M.S....................................... Exercise and Nutritional Sciences
Meehan, Nicole L., M.A............................................. Rhetoric and Writing Studies
Meisner, Rachel S., Ph.D................................................................ Teacher Education
Melgarejo, Melina, Ph.D..................................................................... Special Education
Meltzer, Scott A., M.A.......................................................................... Religious Studies
Mendoza, Irene S., M.S.N. .......................................................................... Nursing
Mendoza, Jose L., M.A...................................................... Spanish and Portuguese
Meneses, Jorge F., Ph.D........ Civil, Construction, and Environmental Engineering



Pintado Riesco, Cristina, M.S.L........................................................ Management


Plump, Brielle J., M.A. Communication

Polit, Katherine L., D.M.A .. Communication Pollack, Robert E., M.S................... Dual Language and English Learner Education Pollock, John D., M.A...................................................................... Men's Basketball Ponce, Rosalba M., M.A................. Dual Language and English Learner Education Potapova, Irina, B.A................... Linguistics and Asian/Middle Eastern Languages Pottathil, Akshay, M.S. Geography
Powell, Rita D., M.S.................................................................. Teacher Education
Prades, Alexandra M., M.A..... Linguistics and Asian/Middle Eastern Languages
Prado Lopez, Elena, M.B.A. ... Economics
Prager, Megan, B.A............................................................................................. Affairs

Preciado, Jose R., B.A....................................... Division of Academic Engagement and Student Achievement
Preciado-Gutierrez, Jesus O., M.S. ........................................ SDSU Imperial Valley
Prescher, Kelly L., Ph.D........................................ Exercise and Nutritional Sciences
Preston, Patricia T., M.S.N............................................................................ Nursing
Price, Stephen H., M.S.................................................................. Computer Science
Prince, John P., B.S.................. Civil, Construction, and Environmental Engineering
Prior, Russell A., M.A. Art and Design
Probett, Christine H., M.B.A. ............................. Management Information Systems

Prodor, Catherine A., M.A............................................................. Special Education
Putko, Carole A., Ph.D................................................................................. History
Quan, Nghiep C., B.A............................................... Rhetoric and Writing Studies
Quarcelino, Theresa A., B.A. ..................................................... SDSU Imperial Valley
Quintero, Brianna, B.A................... College of Professional Studies and Fine Arts
Rahiotis, Miguel, M.A............................................................... SDSU Imperial Valley; Student Affairs
Ramaeker, Benjamin M., M.S. ..................... Hospitality and Tourism Management
Ramirez, Jason C., M.A.............................. College of Health and Human Services; Student Affairs
Ramirez, Jorge A., Ed.D.................. Dual Language and English Learner Education
Ramos, Alissa M., M.A................................................................ SDSU Imperial Valley
Randrup, Nils L., M.B.A....................................... Management Information Systems
Ransom, Bryan K., B.A.............................................................. Music and Dance
Ransom Thomson, Holly E., M.A................................................ European Studies
Rao Sudhakar, Sumangala, Ph.D............................................................ Astronomy
Rapp, Michael W., M.A.................................................................. Communication
Rathbun, Jessica A., M.S.W........................................................................ Social Work
Ravaglioli, Jonathan C., M.S................................................................... Accountancy

Rayan, Maha A., B.S..................................................... Mathematics and Statistics
Rea, Louis M., Ph.D............................................................................................. Public Affairs
Reavis, Karen J., Ph.D......................................................................................... Nursing
Reddick, Bonnie L., Ph.D.................................................................. Africana Studies;
College of Arts and Letters
Reyes, Ascension G., M.A................................................... SDSU Imperial Valley
Reyes, Gilberto, M.A............................................................ SDSU Imperial Valley
Reyes, Herminia V., M.A................................................................................. Philosophy
Reyes, Juanita S., B.A................................................................ SDSU Imperial Valley
Reyes, Marco A., M.A....................................................................... Special Education
Reynoso, Humberto E., M.F.A. ............................................................ Art and Design
Reynoso, Mabelle, M.F.A. ........................................... Theatre, Television, and Film
Rich, Vivian J., M.A................................................................. Teacher Education
Riggs, Mercedes, B.A.............................................................. Women's Basketball
Riley, Eustacia J., Ph.D..................................................................... Art and Design
Riley, Terrie K., B.S................................................................. Mechanical Engineering
Ritter, Christie R., M.S..............................................................
Ritter-Smirniotis, Alicia A., M.A.................................................. Special Education
Rivera, Manuel E., M.S............................... Counseling and Psychological Services
Rivera, Xanthe M., M.S.N..............................................................................................
Rizeq, Hedaya N., M.S......................................... Exercise and Nutritional Sciences
Robbins, Alice A., M.A.................................................................. Teacher Education
Robbins, Brett A., Ph.D.................................................... Classics and Humanities
Robbins, Steven B., D.Ed....................................................................... Management
Roberts, Traci L., M.S............................................ Exercise and Nutritional Sciences
Robinson, Kevin L., M.A.............................................................. Geological Sciences
Robles, Carmen C., M.S.W. ........................................................................ Social Work
Rockland, Steven G., M.A....................................................................... Economics
Rodecker, Stephen B., M.S............................................................................. Education
Rodenberg, Johanna K., Ed.D....................................................... Teacher Education


Sedor, Margaret A., Ph.D................................. Counseling and School Psychology Semm, Paul T., M.A. Sociology
Sendek, Laura, M.A.............................. Speech, Language, and Hearing Sciences Sessoms, Pinata H., Ph.D..................................... Exercise and Nutritional Sciences Shaffar, Scott W., Ph.D. . Mechanical Engineering Shaner, Marieken G., M.S. .............................................................................. Biology Shaul, Kelly C., J.D. .............................................. Management Information Systems Shaw, Barbara F., M.S................................................................... Teacher Education Sheehan, Jerome J., B.A............................................ Theatre, Television, and Film Sheehan, Kevin J., Ph.D. ...................................................................................... History Shembel, Daria, Ph.D.................................................................... European Studies
Shepherd, Judy E., Ph.D.......................................................................... Social Work
Sherman, Beth, M.P.A................................................ Rhetoric and Writing Studies
Shick, Suzanne, M.M..................................................................... Music and Dance
Shigley, Neil, B.A............................................................................ Art and Design
Shipulina Alarcon, Anna............................................................. European Studies
Showghi, Robert S., M.B.A............................. Management Information Systems Shpigelman, Sam, M.F.A.................. Art and Design; Theatre, Television, and Film Shrader, Michael E., M.A. Women's Swimming Shumate, Kathleen R., M.F.A........................ English and Comparative Literature Shuster, Alana, D.Ed................... Linguistics and Asian/Middle Eastern Languages Sidhu, Avneet K., J.D........................................................................................... Finance
Siefert, Kevin M., B.A..................................................... College of Arts and Letters
Siegel, Marci W., M.S.W......................................................................... Social Work
Sigmon, Celia A., M.F.A................................................ Rhetoric and Writing Studies Sikder, Shahir, M.S.... Mathematics and Statistics

## Silva, Jaime G., M.S.

 SDSU Imperial ValleySilver, Jonathan A., M.A. Women's Basketball
Silverman, Bruce J., M.A. Economics
Simek, Kristina L., B.A................................. Hospitality and Tourism Management Simmons, Candice G., Ph.D..................................... Rhetoric and Writing Studies Simons, Amanda C., M.A......... Linguistics and Asian/Middle Eastern Languages Simpson, Jermaine R., M.A. ............................. Counseling and School Psychology Singer, Joanna C., M.S....................................... Counseling and School Psychology Skaathun, Britt P., Ph.D........................................................................ Social Work
Skuster, Sarah E., B.M................................................................. Music and Dance

Slaska, Margaret R., M.S................................... Counseling and School Psychology; Women's Studies
Slater, Martha M., M.A................................................. Rhetoric and Writing Studies
Sleichter, Dani A., M.A..................................................................... Special Education
Sleichter, Jenna E., M.A.................................................................. Special Education
Slinglend, Nicholas A., Ph.D. ....................................... Mathematics and Statistics
Sloan, Michael L., M.A...................................................................... Management
Smith, Anthony A., M.M. ................................................................... Music and Dance
Smith, Hannah L., M.F.A..................................................................... Art and Design
Smith, James T., D.M.A.................................................................. Political Science

Smith, Jane K., Ph.D............................................ Division of Academic Engagement and Student Achievement
Smith, Lisa M., M.S........................................... Counseling and School Psychology Smith, Timothy M., M.S........... Civil, Construction, and Environmental Engineering Snyder, Agustina, M.S.W........................................................... SDSU Imperial Valley Sobie, Robert J., Ph.D. . Public Affairs
Solaimani, Sara, M.A. $\qquad$ .. Chicana and Chicano Studies Solis Torres, Gustavo A., M.S.................................. Journalism and Media Studies Solorzano, Sheila P., M.A.............. Dual Language and English Learner Education Soria, Matthew J., M.A., M.Ed. Men's Basketball
Soto, Anabel, B.A.......................................................... Spanish and Portuguese Soto, Matthew J., B.S......................................... Exercise and Nutritional Sciences
Soukup, Karl P., M.M..................................................................... Music and Dance

Sousa, Margarette P., Ph.D................................. Administration, Rehabilitation and Postsecondary Education
Spalding, Leslie S., B.A......................................................................... Women's Golf
Sparaco, Lisa M., Ph.D.................................................................................... Education
Sparta, Steven N., Ph.D................................................................................. Psychology
Spiegel, John P., M.A....................................................................... College of Sciences
Spilkin, Amy M., Ph.D...................................................................................... Psychology
Spooner, Anne J., M.A........................................... Child and Family Development
Stacy, Daniel F., Ph.D............................................................................. Public Affairs
Stapko, Kathryn A., M.F.A.................................................................. Art and Design
Stark, Frank P., B.E.................. Civil, Construction, and Environmental Engineering
Starr, Eric P., D.M.A............................................................................ Music and Dance
Stech, Summer L., J.D. ................................................................ Special Education

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| :---: | :---: |
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| Stevens, Jonathon K., M.A.................................................... Art and Design |  |
| Stewart, Lori A., M.A..................................................................... Religious Studies |  |
| Stout, Mary E., M.A................................................................................. History |  |
| Strohauer, Tamara L......................................................................... Social Work |  |
| Strom, Yale, M.A. College of Arts and Letters |  |
| Stuart, William C., M.A............................................................. Teacher Education |  |
|  |  |
|  |  |
| Szatkowski, Kari S., M.S................................................. Educational Leadership |  |
| Tafeen, Sara, Psy.D............................... Counseling and Psychological Services |  |
| Tamanaha-Justeson, Debora M., M.A. $\qquad$ Teacher Education |  |
| Tarpley, John V., M.D.I. History |  |
| Tate, Georgia R., M.A. Teacher Education Tatum, Boyd C., Ph.D. Psychology |  |
|  |  |
| Taylor, Inge H., M.A................................................................................... Nursing |  |
| Taylor, Kim O., M.A. Rhetoric and Writing Studies <br> Taylor, Mary M., M.Ed. Special Education |  |
|  |  |
| Taylor, Michael J., Ph.D........................................................................ Psychology |  |
| Tedesco, Carl E., M.S. .................................................. Aerospace Engineering |  |
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| Tempelton, Janet, M.A....................................... Retoric and Writing Studies |  |
| Thelen, Austen J., Ph.D........................................................ SDSU Imperial Valley |  |
| Thoman, Marilyn L., Ph.D......................................................................... Social Work |  |
| Thomas, Sandilyn, B.S.N. <br> Nursing <br> Thompson, Catherine A., Ph.D. Women's Studies |  |
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| Thompson, Pamela W., Ph.D. .............................................. Teacher Education |  |
| Thompson, Renee M., M.S......................................... Mathematics and Statistics |  |
| Thompson, Tyler W., M.A........................................ Rhetoric and Writing Studies |  |
| Thomsen, Jeff C., B.S..................................................................... Men's Tennis |  |
| Thomson, Douglas A., Ph.D.................... Counseling and Psychological Services |  |
|  |  |
| Thorpe, Susan S., M.A......................... Speech, Language, and Hearing Sciences |  |
| Thuet, Coral M., B.A........................................... Chicana and Chicano Studies |  |
| Tillman, Jennifer C., M.A. Philosophy; Sociology |  |
| Tinley, Scott P., Ph.D..................................... Exercise and Nutritional Sciences |  |
| Tipton, Norman E., J.D. ........................................................................... Sociology |  |
| Tiruviluamala, Nakul V., M.M....................................................... Music and Dance |  |
| To, Tuan M., Psy.D. ......................................... Counseling and School Psychology |  |
| Torres, Ricardo B., B.S. Aerospace Engineering Towner, James T., M.A. Rhetoric and Writing Studies |  |
|  |  |
| Travis, Jessica L., B.B.A. $\qquad$ College of Professional Studies and Fine Arts Trujillo, Dale M., M.S.N. $\qquad$ Nursing |  |
|  |  |
| Tung, Hsing-Chen, Ed.D. ................................. Child and Family Development |  |
| Tupper, David R., M.A............................................................ Teacher Education |  |
| Turner, David W., M.S............................................................ Management |  |
| Turner, Katherine C., Ph.D................................................................. Psychology |  |
| Turner, Laura K., Ph.D........................................... Theatre, Television, and Film |  |
| Twayigize, William A., Ph.D..................................................... Political Science |  |
| Tyler, William C., M.S...................................... Management Information Systems |  |
| Ulloa, Carlos, Ed.D...................... Dual Language and English Learner Education |  |
| Ulloa, Emilio C., Ph.D.............................................................. College of Sciences |  |
| Underwood, Michael R., M.A................................ Rhetoric and Writing Studies |  |
| Underwood, Richard A., B.S......... College of Professional Studies and Fine Arts; Theatre, Television, and Film |  |
| Unruh, Lindsay A., M.S. ...................................... Child and Family Development |  |
| Urquhart, Bruce, B.A.............. Civil, Construction, and Environmental Engineering |  |
| Van Patten, Ryan A., Ph.D................................................................. Psychology |  |
| Van Wyk, Kathy N., M.A.............................................................. Women's Softball |  |
| Vanderpot, John L., M.A. Rhetoric and Writing Studies |  |
|  |  |
| Vant Hul, Katilynne N., B.S. Biology <br> Vaquero, Juana, Ph.D. Child and Family Development |  |
|  |  |
| Vasquez Guevara, Priscilla M., Ph.D. ............................................ Public Health |  |
| Vattuone, Gina A., M.A..................................................... Teacher Education |  |
| Velado, Max E., M.S. .............................................. Mathematics and Statistics |  |
| Velarde, Gisselle, B.A............................................ Spanish and Portuguese |  |
| Velazquez, Sobeida, M.Ed........... Dual Language and English Learner Education |  |
| Veseliny, Carolyn W., M.A. $\qquad$ Special Education Vidal, Mary M., M.A. Rhetoric and Writing Studies |  |
|  |  |

Vigil, Amy R., M.A. Teacher Education Villanueva, Danya, M.Ed............... Dual Language and English Learner Education Villodas, Feion M., Ph.D. $\qquad$ College of Sciences Villodas, Feion M., Ph.D............................................................................... Psychology Vinel, Nicolas G., B.S..

## S.

 Vlosich, Brittany A., B.Vogt, James V., M.S. VonRotz, Denise M., M.A. Voytilla, Stuart W., M.F.A.
Waite, Alyssa N., B.S.
Waldron, Mary L., B.A...................... Women' Language and English Learner Education
Walker, Dustin R., Ph.D.
$\qquad$
$\qquad$ Rhetoric and Writing Studies
Walsh, Margaret L., Ph.D. $\qquad$ Waltz, Shannon S., B.S................................................................................. Biology
Wang, Qian, M.A......................... Linguistics and Asian/Middle Eastern Languages
Wang, Yiting, M.A........................................................................ Music and Dance
Warner, Stacy L., B.G.S.............................................................. Computer Science
Warschauer, Thomas M., D.B.A......................................................................... Finance
Watkins, Gail L., M.A. .............................................................. SDSU Imperial Valley
Weaver, Abigayle L., B.M............................................................... Music and Dance
Weber, David B., Ph.D...................................................... Mathematics and Statistics
Weeks, Margaret, B.S......................................................................... Art and Design
Weeks, William E., Ph.D. ................................................................................... History
Weinrich, James D., Ph.D..................................................................... Psychology; SDSU Imperial Valley
Weintraub, Janis L., M.A............................................................... Teacher Education
Weise, Aliya J., Ph.D..................................................................... Teacher Education
Weiss, Elizabeth R., Ed.D.............................................................................. Education
Weller, Rebecca S., B.S..................................... Exercise and Nutritional Sciences
Werdowatz, Dan R., M.S........ Civil, Construction, and Environmental Engineering
Wheat, Michael G., J.D.......................................................................... Public Affairs
White, Kylee A., B.S................................................................ Women's Lacrosse
White, Siobhan T., M.A................................................ Rhetoric and Writing Studies
Whitehead, Ahkeel C., B.S................................. Exercise and Nutritional Sciences
Whiteside, Hillary A., M.A............................................................. Special Education
Whitman, David R., D.M.A.................................................................. Music and Dance
Whitmore, Tessie C., M.F.A.
Art and Design
Whitworth, Emmalee R., M.A...................................... Rhetoric and Writing Studies
Wible, Stacy J., M.A. ..................................................................... Teacher Education
Wible, William W., M.A............................................................. Teacher Education
Wield, Paul J., M.E................................................................ Mechanical Engineering
Wilder, April M., Ph.D..................................... English and Comparative Literature
Wiley, Julie D., J.D............................................................................ Public Affairs
Wiley, Sandra E., M.S. ..................................................... Chemistry and Biochemistry
Wilkinson, Marco, M.F.A................................. English and Comparative Literature
Williams, Allyson B., M.A............................................................... Art and Design
Williams, Emir E., B.S.............. Civil, Construction, and Environmental Engineering
Williams, Janette S., Ph.D................................................................... Management
Williams, Julie A., M.A.................................................. Rhetoric and Writing Studies
Williams, Laura J., M.M................................................................. Teacher Education
Williams, Marla G., M.A................................................ Rhetoric and Writing Studies
Williams, Shiloh A., M.S.N........................................................ SDSU Imperial Valley
Williamson, James E., Ph.D........................................................................ Accountancy
Williford, Douglas, M.A............................................................................. Public Affairs
Wilson, Gregory J., Ed.D.................................... Administration, Rehabilitation and Postsecondary Education
Wilson, Larry K., B.A............................................................... Teacher Education
Wilson, Leslie A., Ph.D............................. Counseling and Psychological Services
Wilson, Mary C., B.F.A...................................... Art and Design; Teacher Education
Wilson, Ronald B., M.F.A. ............................................................ SDSU Imperial Valley

Wilson, Tracy L., M.A........................................... Counseling and School Psychology
Winchell, Jill G., B.A................................................................................ Art and Design
Windmiller, Gur, M.S...................................................................................... Astronomy

Winslow, Allison A., M.A................................................................. Communication
Wojtach, Barbara R., M.S.W.................................... Child and Family Development
Wong, Amy B., B.S.. Mechanical Engineering
Wong, Amy C., M.A

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Wood, Carlo A., Ph.D........................................ Exercise and Nutritional Sciences
Woodard, Claudia P., B.A................................................ Spanish and Portuguese
Woodard, Tyrus E., Ed.S................................................................ Teacher Education
Woods, Ann C., Ph.D... . Art and Design
Woods, Kristin L., Au.D.
............................ Speech, Language, and Hearing Sciences

Worsham, Sabrina L., M.A.
SDSU Imperial Valley
Wright, Nelson D., M.Ed.
Administration, Rehabilitation and Postsecondary Education
Wysocki, David J., M.A. ............................................. College of Arts and Letters
Wyss, Robert S., B.F.A........................................................................... Art and Design
Yaghmaee, Saman, M.A............................................................................. Social Work
Yamada, Hidenori, Ph.D................................ Electrical and Computer Engineering
Young, Michael J., M.S................................................... Strength and Conditioning
Zack, William L., M.B.A. Women's Crew
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## Credits

## General Catalog 2020-2021

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## General Catalog, Graduate Bulletin, and Class Schedule

The General Catalog is published online in the spring and is available on the SDSU website at http://curriculum.sdsu.edu. The General Catalog contains information for undergraduate students on admissions, fees and tuition, financial aid and scholarships, programs and degrees, courses, residence halls, student services and activities, and a faculty directory.

The Graduate Bulletin contains information for graduate students on admissions, fees and tuition, financial aid, programs and degrees, courses, and student services. The Graduate Bulletin is available on the SDSU website at http://curriculum.sdsu.edu/.

The Class Schedule is published online each semester at http:// www.sdsu.edu/schedule. The Class Schedule contains the list of classes offered each term, instructions for registration, and links to student resources.

SDSU Global Campus also publishes extension, certificate, and professional development programs and courses available to the general public on its website, http://neverstoplearning.net.


[^0]:    *Established by and payable to the California Commission on Teacher Credentialing.
    **Late fee also charged when applicable.

[^1]:    *These scores are appropriate only to those students who satisfy the requirement upon matriculation in this catalog year or who take the examinations during this catalog year.
    ${ }^{\wedge}$ Students for whom comparable records or examinations such as SAT/ACT are not available, will be assessed utilizing a campus-based assessment tool for placement in mathematics/quantitative reasoning courses.

[^2]:    *These scores are appropriate only to those students who satisfy the requirement upon matriculation in this catalog year or who take the examinations during this catalog year.

[^3]:    ${ }^{\mathscr{H}}$ Ethnic studies course.
    $\wedge$ Taught in English.

[^4]:    ${ }^{\wedge}$ Taught in English.
    *Ethnic studies course.
    *Cultural diversity course.

[^5]:    *Cultural diversity course.

[^6]:    *Cultural diversity course
    ${ }^{\mathscr{R}}$ Ethnic studies course
    ${ }^{\wedge}$ Taught in English

[^7]:    \# An emphasis within the B.S. in Business Administration

[^8]:    * Advisers in prelaw are not available during the summer months.

[^9]:    *Additional prerequisites in mathematics and physics required for these
    courses.

[^10]:    +Indicates course with prerequisites not included in requirements listed

    ## above

[^11]:    GRADUATE COURSES
    Refer to the Graduate Bulletin.

[^12]:    *Business Administration 323 waived for Fowler College of Business,
    Hospitality and Tourism Management, and International Business majors.

[^13]:    *Additional prerequisites required.

[^14]:    *If more than one of these courses are completed, the additional course(s) will count as an elective.
    +Additional prerequisites required.

[^15]:    ${ }^{(1)}$ The statewide TMC in liberal studies includes courses equivalent to the Lower Division Core completed by students in the Elementary Education, Mathematics, and Science emphases with the following distinctions: a) courses equivalent to Music 151 and Theatre 100 are additional choices for the II.C.2. Visual and Performing Arts requirement and b) a fourth General Education Humanities philosophy, religious studies, or foreign language course is not required. The foci for the Education-Generalist emphasis does not include a breadth requirement for Chemistry 308 or Natural Science 100 because this requirement is part of the TMC.
    ${ }^{(2)}$ Students must pass the Liberal Studies Mathematics Proficiency Assessment prior to enrolling in Mathematics 312 and 313.
    ${ }^{(3}$ Linguistics 253 [or Rhetoric and Writing Studies 253]. Discuss with adviser
    ${ }^{(4)}$ Prerequisite: Linguistics 420 in the major.

[^16]:    ${ }^{(1)}$ Students must pass the Liberal Studies Mathematics Proficiency Assessment prior to enrolling in Mathematics 312 and 313.
    ${ }^{(2)}$ Verify with a liberal studies adviser.

[^17]:    *Upper division standing required for all Journalism and Media Studies courses listed.
    \# Integrated Marketing Communications students may add this course on a
    space-available basis during the add period with consent of instructor.
    @ Journalism and Media Studies 310W prerequisite waived for this course.
    ${ }^{\wedge}$ Additional prerequisites waived for this course
    \%Integrated Marketing Communications students are required to have completed Marketing 470 as a prerequisite to this course.

[^18]:    *Required of all single subject ITEP majors regardless of Writing Proficiency Assessment score.

[^19]:    *AP credit automatically clears the language requirement.

[^20]:    *No more than three units may be applied to the minor in women's studies

[^21]:    *Credit may not be earned at SDSU for courses which duplicate credit already allowed for examinations as listed under SDSU course equivalents.
    **Student must also take Music Placement Examination.
    ***Satisfies the language requirement.

[^22]:    ${ }^{\mathbf{1}}$ Represents state GF appropriation in the Budget Act of 2019-20; GF is divisible by resident students only ( 374,131 FTES).
    $\mathbf{2}^{2}$ Represents CSU Operating Fund, gross tuition and other fees revenue amounts submitted in campus August 2019-20 final budgets. Revenues are divisible by resident and nonresident students (398,157 FTES).

