

## Elliot Hirshman

President
San Diego State University

## Welcome to SDSU

At San Diego State University, we're asking fundamental questions.
How do we inspire leadership?
How do we nurture tomorrow's leaders?
The answers emerge when students work alongside faculty researchers to improve lives; when innovation is not only taught, but practiced; and when students, faculty, and staff take on society's problems with dedication and purpose.

San Diego State University is characterized by remarkable students, exceptional and dedicated faculty and staff, and innovative programs. We are an intellectual community committed to the ideals of diversity and dedicated to human growth and development. Guided by our strategic plan, we are moving forward with initiatives to enhance student success, research and creative endeavors, and community and communication. We are resolving today's questions and anticipating those of tomorrow.


## Academic and Community Engagement

San Diego State University is a community of people committed to student success and life-changing opportunities for students, including study abroad, undergraduate research, internships and entrepreneurial experiences. SDSU is the oldest and largest higher education institution in the San Diego region, and these deep community roots provide access to internships, mentoring relationships, and volunteer opportunities that complement and enhance the classroom experience.


SDSU is an academically rich university that provides endless possibilities for students: bachelor's degrees in 94 areas, master's degrees in 78 fields, and 22 doctoral degrees (Ph.D., Ed.D., Au.D., DNP, and DPT). SDSU is a place for the best and brightest to dream of who they will become and to make those dreams a reality.
ii 2015-2016 General Catalog

# Diversity and Inclusive Excellence 

Diversity is a hallmark of San Diego State University, where all students-regardless of background or station-can achieve excellence and success. The university has been recognized for the nation's largest increase in graduation rates and for reducing the achievement gaps among ethnic and racial groups.


SDSU's campus reflects the diversity of our region and the world beyond. Students from more than 90 nations contribute to SDSU's dynamic mix of ethnic, racial, and social backgrounds.

SDSU ranks No. 6 in the nation for ethnic and racial diversity, is recognized as a Hispanic-serving institution, and is one of the top universities in economic diversity. More than half of our students and 40 percent of our tenured-track faculty members are women. We are a national
 model for educating military veterans, and we are ranked among the most LGBT-friendly campuses in the nation.



# International Education and Global Perspectives 

One of our goals at SDSU is to "create a global campus" by promoting internationalization in everything from curriculum content to cultural campus activities and international research and exchange programs.

SDSU ranks in the top 25 in the number of students who study abroad to gain new perspectives and to grow personally and intellectually. More than 2,100 SDSU students study abroad each year in 52 countries, including the United Kingdom, China, Italy, Mexico, and Spain.

Our campus-based academic programs reinforce this global perspective. These programs include the Center for International Business Education and Research; the Center for Latin American Studies; the International Security and Conflict Resolution degree program; and the International Business major, which is ranked No. 10, and is one of the largest programs of its kind in the nation.



SDSU students study hard, but they also know how to have fun outside the classroom. You can join an intramural sports team
 or an honor society, lead a community service project or the student body, live on our lively campus or on fraternity row. Our new Conrad Prebys Aztec Student Union, built to LEEDplatinum energy standards, is a hub for student activities with its Commuter Resource Center, restaurants, bowling alley and game room, meeting spaces, and theatre.

You can cheer on 19 NCAA Division I 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 played in the Sweet 16. Our football team has won 19 conference championships in its long and storied history and has a string of bowl game appearances.


## Research and Creative Endeavors

San Diego State is a leading public research university with a thriving research agenda and competitive awards totaling nearly $\$ 108$ million annually—including more than 156 awards from the National Institutes of Health and the National Science Foundation.

Undergraduate research and entrepreneurship are hallmarks at SDSU. Students collaborate with faculty and staff in on-campus laboratories to address national and global challenges and build innovative projects and new companies in our entrepreneurship and innovation centers.

More than 65 SDSU students have earned prestigious Fulbright awards since 2005, while other students have received the Udall Scholarship for environmental work or Gates Cambridge Scholarships.


## Leadership Starts Here

SDSU lives by the ethos Leadership Starts Here.
When you think about it, Leadership Starts Here is a pretty bold statement. It is also a promise-one that our students keep every day by focusing on academic excellence and engaging society's challenges.

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


SDSU alumni lead businesses and organizations throughout the world. They are CEOs, presidents, founders, and partners. Aztecs run biotech companies, accounting firms, restaurant chains, film studios, and hospitals.



## Mission of the University



The mission of San Diego State University is to provide researchoriented, high-quality education for undergraduate and graduate students, and to contribute to the solution of problems through excellence and distinction in teaching, research, and service.

The university strives to impart an appreciation and broad understanding of the human experience throughout the world and the ages. This education extends to diverse cultural legacies and accomplishments in many areas, such as the arts and technology; the advancement of human thought including philosophy and science; the development of economic, political, and social institutions; and the physical and biological evolution of humans and their environment.


San Difgo State UNIVERSITY

San Diego State University pursues its mission through its many and diverse departments and interdisciplinary programs in the creative and performing arts, the humanities, the sciences, and the social and behavioral sciences.

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[^0] 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 883, 927, 928, and 1074.

## Annual Calendar

| CALENDAR 2015 |  |  |
| :---: | :---: | :---: |
| JANUARY | FEBRUARY | MARCH |
| S M T W T F S | S M T W T F S | S M T W T F |
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| APRIL | MAY | JUNE |
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| JULY | AUGUST | SEPTEMBER |
|    1 2 3 4 <br> 5 6 7 8 9 10 11 <br> 12 13 14 15 16 17 18 <br> 19 20 21 22 23 24 25 <br> 26 27 28 29 30 31  | $\|$2 3 4 5 6 7 8 <br> 9 10 11 12 13 14 15 <br> 16 17 18 19 20 21 22 <br> 23 24 25 26 27 28 29 <br> 30 31      |   1 2 3 4 5 <br> 6 7 8 9 10 11 12 <br> 13 14 15 16 17 18 19 <br> 20 21 22 23 24 25 26 <br> 27 28 29 30    |
| OCTOBER | NOVEMBER | DECEMBER |
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| CALENDAR 2016 |  |  |
| :---: | :---: | :---: |
| JANUARY | FEBRUARY | MARCH |
| S M T W T F | S M T W T F S | S M T W T F S |
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| JULY | AUGUST | SEPTEMBER |
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| OCTOBER | NOVEMBER | DECEMBER |
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## SUMMER TERM 2015

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May 21 First day of summer term
May 21-July 2 Session S1 term.
May 21-August 14 Session T1 term.
May 21 First day of S1 and T1 classes.
May 25 Holiday - Memorial Day.
Faculty/staff holiday. Campus closed.
June 1 Last day to add/drop S1 classes
June 3 Last day to add/drop T1 classes.
July 1 Applications for bachelor's degree for May and
August 2016 graduation accepted.
July 1 Applications for advanced degree for May and August 2016 graduation accepted.
July 2 Last day of S1 classes.
July 3 Holiday - Independence Day observed. Faculty/staff holiday. Campus closed.
July 4 Independence Day.
July 6 First day of S2 classes.
July 6 - August 14 Session S2 term.
July 6 First day of S2 classes.
July 14 Last day to add/drop S2 classes.
July 16 Census.
August 14 Last day of T1 and S2 classes (Final examinations are the last day of classes for each summer session.)
August 18 Last day of summer term.
August 18 Grades due from instructors. (11 p.m. deadline.)
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## FALL SEMESTER 2015

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August 19 First day of fall semester.
August 20 Last day to officially withdraw for fall semester 2015 and receive a full refund.
August 20 Convocation.
August 22 New Student and Family Convocation.
August 24 First day of classes.
September 2 Last day for faculty to drop students from classes.
September 4 Last day to add/drop classes or change grading basis.
September 4 Last day for payment of fees for late registration.
September 4 Last day to officially withdraw from the university without penalty fee for fall semester 2015
September 4 Last day to file application for bachelor's degree for December 2015 graduation.
September 4 Last day to file application for advanced degree for December 2015 graduation.
September 4 Last day to file petition for concurrent master's degree credit for fall semester 2015.
September 7 Holiday - Labor Day.
Faculty/staff holiday. Campus closed.
September 21 Census.
October 1 Applications for admission or readmission to San Diego State University for the fall semester 2016 accepted. Undergraduate applications are NOT accepted after November 30 (postmarked). Graduate applicants should consult the Graduate Admissions website for closing dates.
November 2 Last day to officially withdraw from all classes for fall 2015 and receive a prorated refund (withdrawal after September 4 requires special approval and penalty fee is assessed).
November 11 Holiday - Veteran's Day.
Faculty/staff holiday. Campus closed.
November 25 No classes. Campus open.
November 26-27 Holiday - Thanksgiving recess.
Faculty/staff holiday. Campus closed.
December 10 Last day of classes.
December 11-17 Final examinations.
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December 22-25 Holiday - Winter break.
Faculty/staff holiday. Campus closed.
December 28-31 No classes. Campus open.
December 31 Grades due from instructors. (11 p.m. deadline.)
December 31 Last day to apply for a leave of absence for fall semester 2015.
December 31 Last day of fall semester.

## SPRING SEMESTER 2016

January 1 Holiday - New Year's Day. Faculty/staff holiday. Campus closed.
January 18 Holiday - Martin Luther King, Jr. Day. Faculty/staff holiday. Campus closed.
January 19 First day of spring semester.
January 19 Last day to officially withdraw for spring semester 2016 and receive a full refund.
January 20 First day of classes.
January 29 Last day for faculty to drop students from classes.
February 1 Applications for bachelor's degree for December 2016 graduation accepted
February 1 Applications for advanced degree for December 2016 graduation accepted.
February 2 Last day to add/drop classes or change grading basis.
February 2 Last day for payment of fees for late registration.
February 2 Last day to officially withdraw from the university for spring semester 2016.
February 2 Last day to file application for bachelor's degree for May and August 2016 graduation.
February 2 Last day to file application for advanced degree for May and August 2016 graduation.
February 2 Last day to file petition for concurrent master's degree credit for spring semester 2016.
February 16 Census.
March 22 Last day to officially withdraw from all classes for spring 2016 and receive a prorated refund (withdrawal after February 2 requires special approval and a penalty fee is assessed).
March 28-April 1 Spring break.
March 31 Holiday - Cesar Chavez Day. Faculty/staff holiday. Campus closed.
April 4 Classes resume.
May 5 Last day of classes.
May 6-12 Final examinations.
May 12 Commencement, Imperial Valley campus.
May 13-15 Commencement, San Diego campus.
May 20 Grades due from instructors. (11 p.m. deadline.)
May 20 Last day to apply for a leave of absence for spring semester 2016.
May 20 Last day of spring semester.

## SUMMER TERM 2016

NOTE: Summer session dates to be determined. Refer to SDSU Summer Session Class Schedule.
May 30 Holiday - Memorial Day. Faculty/staff holiday. Campus closed.
July 1 Applications for bachelor's degree for May and August 2017 graduation accepted.
July 1 Applications for advanced degree for May and August 2017 graduation accepted.
July 4 Holiday - Independence Day.
Faculty/staff holiday. Campus closed.


## PART ONE

## Administration and_Organization

## Administration and Organization

## Principal Officers of Administration

President of the University
Elliot Hirshman
Provost and Senior Vice President for
Academic Affairs. $\qquad$ Chukuka S. Enwemeka
Vice President for Business and Financial Affairs
and Chief Financial Officer .......................... Thomas J. McCarron
Vice President for Research and Graduate Dean.... Stephen C. Welter
Vice President for Student Affairs ................................ Eric M. Rivera
Vice President for University Relations
and Development.
Mary Ruth Carleton

## Administration

## Office of the President

Chief of Staff............................................ Megan Collins (Interim)
Chief Diversity Officer ................................................. Aaron Bruce

## Office of the Provost

Associate Vice President for Academic Affairs
........................... Kathryn J. LaMaster Director of Instructional

Technology Services ...................................James P. Frazee
Associate Vice President for
Enrollment Management $\qquad$ . Sandra A. Cook
Director of Analytic Studies and Institutional Research Jeanne Stronach Assistant Vice President for Technology Services.. Tony Chung Associate Director of

Enrollment Services $\qquad$ Sandra Temores-Valdez Director of Admissions $\qquad$ Sabrina Cortell Director of Advising and Evaluations ............. Sandra L. Williams Director of Curriculum Services. $\qquad$ Stephanie Samuels Registrar
...Rayanne Williams
Associate Vice President for Faculty Affairs
Assistant Vice President for International Programs
.Alan R. Sweedler
Chair of the Senate
David P. Ely

## Office of the Vice President for Business and Financial Affairs

Associate Vice President for Administration
Jessica Rentto
Associate Vice President for Business Operations and Chief Information Officer
Associate Vice President for
Financial Operations .......
Real Vice Planning, and Devepment .inm...Robert Schuz
Real Estate, Planning, and Development
Agnes Wong Nickerson

University Controller
nterprise Technology Senior Director

Christopher Bronsdon
Kent McKelvey (Interim)
Director of Audit and Tax.............$~$ $\qquad$ . Valerie Peterson
......................... Crystal Little
Director of Business Enterprises............... Martin Munoz Careaga
Director of Business Information Systems ............. Cyndie Winrow
Director of Business Services ................................. Leslie Rutledge
Director of Center for Human Resources...............Thomas Harpole
Director of Construction Management..................... Mike Woomer
Director of Contract and Procurement
Management.
Cathy Garcia
Director of Environmental Health and Safety ............ Terry D. Gee
Director of Facilities Planning ..................................... Laura Shinn
Director of Facilities Services John Ferris
Director of Housing Administration .............................Eric Hansen
Director of Intercollegiate Athletics ...................................... Jim Sterk
President of Aztec Club ................................................................. Cook
Director of Project Management .................................. Jeff Brown
Director of Public Safety ......................................... Lamine Secka
Director of University Computer Operations............. Edgar Hodge
Director of Employee Relations and Compliance.
Information Technology Security Officer.................Felecia Vlahos

Office of the Vice President for Student Affairs
Associate Vice President for Student
Affairs Administration ...................................... Linda Lewiston
Associate Vice President for Student Affairs Campus Life

Christy Samarkos
Associate Vice President for Student Affairs Student Services..
. Reginald S. Blaylock
Assistant Vice President for Student Affairs
Technology Services
Tony Chung
Director of Assessment and Research .......... Reynaldo I. Monzon
Director of Career Services.............................
Director of Center for Intercultural
Relations $\qquad$ .. Christy Quiogue (Interim)
Director of Communications Services...Kimberly Lamke Calderon
Director of Compact for Success.............Wendy Aleman (Interim)
Director of Counseling and Psychological
Services ............................................................. Jennifer Rikard
Director of Educational Opportunity Programs
and Ethnic Affairs .
... Beverly Warren
Director of Financial Aid
and Scholarships ................................................Rose Pasenelli
Director of Health Promotion ...................................... James Lange
Director of International Student Center ........... Noah W. Hansen
Director of New Student and
Parent Programs ..............................................Michelle Guerra
Director of Residential Education .................................... Kara Bauer
Director of Student Affairs Resource
Management
..Rashmi Praba
Director of Student Disability Services................... Pamela J. Starr
Director of Student Health Services ........... Gregg A. Lichtenstein
Director of Student Life \& Leadership................. Randall W. Timm
Director of Student Rights and Responsibilities .............Lee Mintz
Director of Technology Services ............... Ananth Padmanabham
Director of Testing Services ......................................Janet Castro
Ombudsman ........................................................... Marit Bessesen

## Office of the Vice President for University Relations

and Development
Chief Financial Officer........................................... Sarah Slaughter
Chief Communications Officer ................................. Gregory Block
Associate Vice President for
Development $\qquad$
Assistant Vice President for
Alumni Engagement ......................................James S. Herrick
President of SDSU Alumni Association
Board of Directors
Elsa Romero
Assistant Vice President for Campaign, Presidential,
and Special Events.......................................... Chris Lindmark
Assistant Vice President for
Planned Giving and Estates
Amy Walling
SDSU Fund Tammy Blackburn

## Colleges, Schools, Departments, and Programs

COLLEGE OF ARTS AND LETTERS


## COLLEGE OF BUSINESS ADMINISTRATION




IMPERIAL VALLEY CAMPUS
Dean. David E. Pearson
Associate Dean for Academic Affairs Michael J. Sabath..Miguel Rahiotis
Director of Business and
Financial Services Irma MartinezDirector of Development andValorie A. Ashley
Director of Student Affairs Miriam Castañon
GRADUATE AND RESEARCH AFFAIRS
Vice President for Research and Graduate Dean ..Associate Dean for Graduate and
Research Affairs. Joanna BrooksGraduate Affairs
ofResearch Affairs ..................................................... Rick Gulizia
UNDERGRADUATE STUDIES
Dean Geoffrey W. Chase
Associate Dean

$\qquad$
Stephen A. Schellenberg
Assistant Dean .Michelle Lopez
Programs
Academic Engagement Programs José Preciado
Center for Regional Sustainability ..... Geoffrey W. Chase
Center for Teaching and Learning ..... .....  Jennifer Imazek
ompact Scholars Program Janet Abbott
Early Assessment Program. ..... Rosie Villafana-HatcherThree Departments...
Paul W. Justice
Liberal Studies Program ..... Sharon F. Bendal
National Scholarships and Fellowships Michelle Lopez
Sage Project Jessica A. Barlow
homas B. Day StudentJanet Abbott
Undeclared Advising ..... Michelle Lopez
Undergraduate Research José Preciado
Weber Honors College. ..... Stacey L. Sinclair
COLLEGE OF EXTENDED STUDIES
Dean. ..... Joseph B. Shapiro
Associate Dean for Administration
Associate Dean for Administration
Associate Dean for Programming .Francesca RinglandExecutive Director of American LanguageInstituteBarbara BassExecutive Director of Budget and FinanceTamara McLeodExecutive Director of ProgramsExecutive Director of Registration andEnrollment ServicesCherie Bloodworth
Executive Director of New Initiatives and Outreach

## Auxiliary Organizations

| The Campanile Foundation |  |
| :---: | :---: |
| Chair............................................................Jack McGrory |  |
| Chief Financial Officer..................................... Sarah Slaughter |  |
| Secretary..................................... Joanne M. Ferchland-Parella |  |
| San Diego State University Research Foundation |  |
| President ....................................................... Elliot Hirshman |  |
| Vice President ...............................................Stephen Welter |  |
| Executive Director...........................................Bob E. Wolfson |  |
| Aztec Shops, Ltd. |  |
| Chief Executive Officer ....................................... Donna Tusack |  |
| The Associated Students of San Diego State University |  |
| President ............................................................. Blaire Ward |  |
| Executive Director .......................................... Christina Brown |  |
| KPBS |  |
| General Man | Thomas Karlo |

## PART TWO

## Academic Advising Admission and Registration <br> Fees

Financial Aid and Scholarships
Student Services
Special Programs and Senvices

## 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 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. 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 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 <br> Purchase a General Catalog. Know your catalog year (or

 years) for your General Education requirements and for your major requirements and be sure you have a copy of this 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 in this section of the catalog.Use your degree evaluation. Your online degree evaluation, available at http://www.sdsu.edu/portal, provides an unofficial status report on your progress toward completing the graduation requirements for your major. 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 255, 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 619-5941553, Monday through Thursday, 9 a.m. - 4 p.m.

The Academic Advising Center works with the university commu nity 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.

> Graduation Requirements
> General Education
> Undeclared Students

University Academic<br>Policies and Regulations<br>Unofficial Evaluations<br>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:

## Predental

Geology/Mathematics/Computer Science, Room 323 .... 619-594-6638
Prelaw*
Adams Humanities, Room 4142. 619-594-5050
Premedical
Geology/Mathematics/Computer Science, Room 323 .... 619-594-6638
Preoccupational Therapy
Exercise and Nutritional Sciences, Room 331 ............. 619-594-516
Preoptometry
Geology/Mathematics/Computer Science, Room 323 .... 619-594-6638
Prepharmacy
Geology/Mathematics/Computer Science, Room 323 .... 619-594-6638
Prephysical Therapy
Exercise and Nutritional Sciences, Room 331
619-594-5161
Prephysician Assistant
Geology/Mathematics/Computer Science, Room 323 .... 619-594-6638
Prepodiatric Medicine
Geology/Mathematics/Computer Science, Room 323 .... 619-594-6638
Presocial Work
Hepner Hall, Room 109
619-594-0780
Preveterinary Medicine
Geology/Mathematics/Computer Science, Room 323 .... 619-594-6638

* 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
Chicana and Chicano Studies
Arts and Letters, Room 348
619-594-6452
Chinese
Storm Hall West, Room 214
619-594-5268
Classics and Humanities
Arts and Letters, Room 662
619-594-5186

Comparative International Studies
Arts and Letters, Room 613 ............................................619-594-5028
Economics
Nasatir Hall, Room 329.................................................. 619-594-1675
English and Comparative Literature
Arts and Letters, Room 226
619-594-5307
Filipino
Storm Hall West, Room 214 ............................................ 619-594-5268
European Studies (Minor)
Education and Business Administration, Room 304 .... 619-594-5111
French and Italian (Minor)
Education and Business Administration, Room 304 .... 619-594-6491
Geography
Geography Annex, Room 123 ....................................... 619-594-5437
German and Russian
Education and Business Administration, Room 304 .... 619-594-6313
Hebrew
Storm Hall West, Room 214 ........................................... 619-594-5268
History
Arts and Letters, Room 588 ........................................... 619-594-5262
International Business
Arts and Letters, Room 208 ........................................... 619-594-4505
International Security and Conflict Resolution
Storm Hall, Room 223B
619-594-3768
Japanese
Storm Hall West, Room 214 ......................................... 619-594-5268
Jewish Studies (Minor)
Arts and Letters, Room 662A ........................................ 619-594-5338
Korean
Storm Hall West, Room 214 .......................................... 619-594-5268
Latin American Studies
Arts and Letters, Room 377 .......................................... 619-594-1103
Lesbian, Gay, Bisexual, and Transgender Studies
Arts and Letters, Room 317
619-594-6662
Linguistics and Asian/Middle Eastern Languages
Storm Hall West, Room 214
619-594-5268
Persian
Storm Hall West, Room 214 ........................................... 619-594-5268
Philosophy
Arts and Letters, Room 446 ......................................... 619-594-5263
Political Science
Adams Humanities, Room 4142......................................619-594-6244
Religious Studies
Arts and Letters, Room 662 .......................................... 619-594-5185
Rhetoric and Writing Studies
Adams Humanities, Room 3138.................................... 619-594-6515
Russian and Central European Studies
Education and Business Administration, Room 304 .... 619-594-5111
Social Science
Arts and Letters, Room 588 ........................................... 619-594-6344
Sociology
Nasatir Hall, Room 224................................................... 619-594-4826
Spanish and Portuguese
Arts and Letters, Room 134 ........................................... 619-594-6588
Sustainability
Arts and Letters, Room 417 .............................................619-594-0978
Storm Hall, Room 314 .....................................................619-594-0902
Urban Studies
Storm Hall, Room 314 ....................................................619-594-5437
Women's Studies
Arts and Letters, Room 346
619-594-6524

## COLLEGE OF BUSINESS ADMINISTRATION

Assistant Dean
Education and Business Administration, Room 448 ...... 619-594-5828
Undergraduate Business Advising Center
Education and Business Administration, Room 448 ...... 619-594-5828
Undergraduate: http://www.sdsu.edu/undergradbiz
Accountancy Management
Finance
Financial Services
Information Systems
International Business (See
College of Arts and Letters)
Graduate Business Advising Office
Marketing
Pre-Business
Real Estate

619-594-8073
Education and Business Administration, Room 448
Graduate website: http://www.sdsu.edu/graduatebusiness
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 of Student Services
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
Bilingual (Spanish) Special Education
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 403 ...... 619-594-5380
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

## Master's Programs

See individual department listings
Doctoral Programs
Nursing (Health Services - School Nurse)
Adams Humanities, Room 3133
619-594-5117
Social Work
Hepner Hall, Room 119 $\qquad$ 619-594-0780
Pupil Personnel Services
Child Welfare and Attendance
School Social Work
Special Education
North Education, Room 70
619-594-6665
Specialist Credentials
*Early Childhood Special Education
*Mild/Moderate Disabilities
*Moderate/Severe Disabilities
Certificate Programs
Behavior Analysis
Developing Gifted Potential
Early Childhood Special Education Authorization
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
*Multiple Subject and Single Subject
Reading/Language Arts 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.
.619-594-6506
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 109 619-594-0780
Exercise and Nutritional Sciences
(Athletic Training, Foods and Nutrition, Kinesiology)
Exercise and Nutritional Sciences, Room 353 .............. 619-594-5161
Nursing
Adams Humanities, Room 3133
619-594-5117
Public Health
Hardy Tower, Room 109 ................................................ 619-594-1623
Social Work
Hepner Hall, Room 119 ................................................. 619-594-0780
Speech, Language, and Hearing Sciences
Speech, Language, and Hearing, Room 244
619-594-4787

## COLLEGE OF PROFESSIONAL STUDIES AND FINE ARTS

## Assistant Dean

Professional Studies and Fine Arts, Room 212 ..............619-594-6928
Aerospace Studies (Minor)
Exercise and Nutritional Sciences, Room 385 ............. 619-594-5545
Art and Design
Art, Room 509 ............................................................. 619-594-2850
Communication
Communication, Room 240 $\qquad$ .619-594-3444
Hospitality and Tourism Management (Hospitality and Recreation)
Professional Studies and Fine Arts, Room 436B............619-594-4964
International Studies (Minor)
Professional Studies and Fine Arts, Room 231 ...............619-594-4633
International Security and Conflict Resolution
Storm Hall, Room 223B .
619-594-3768
Journalism and Media Studies
Professional Studies and Fine Arts, Room 366 ............. 619-594-5145
Learning Design and Technology
North Education, Room 361 ..........
Distance Education Certificate
Distance Education Certificate
Instructional Design Certificate
Instructional Technology Certificate
Military Science (Minor)
Exercise and Nutritional Sciences, Room 451 .............. 619-594-4943
Music and Dance
Music, Room 111
619-594-6032
Naval Science (Minor)
Communication, Room 130
619-594-1134
Public Affairs (Criminal Justice, Public Administration)
Professional Studies and Fine Arts, Room 100 ............ 619-594-6084
Theatre, Television, and Film
Dramatic Arts, Room 204
619-594-4936

## COLLEGE OF SCIENCES

## Assistant Dean

Geology/Mathematics/Computer Science, Room 321 ..... 619-594-5350
Astronomy
Physics, Room 131 $\qquad$ 619-594-6240
Biology
Life Sciences, Room 135 $\qquad$ 619-594-6442

| Cellular and Molecular | Evolution and Systematics |
| :--- | :--- |
| Clinical Laboratory Science and | Marine Biology |
| Public Health Microbiology | Microbiology |
| Ecology | 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
Physical Sciences, Rooms 100 and 103 $\qquad$ 619-594-5386
Geological Sciences
Geology/Mathematics/Computer Science, Room 237 ..... 619-594-5586

| General Geology | Hydrogeology |
| :--- | :--- |
| Engineering Geology | Paleontology |
| Environmental Geosciences | Oceanography (Minor) |
| Geophysics |  |

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
Preprofessional Health Advising
Geology/Mathematics/Computer Science, Room 323 ..... 619-594-6638
Psychology Advising Center
Life Sciences, Room 105.. 619-594-5412

## DIVISION OF UNDERGRADUATE STUDIES

Assistant Dean, Administration, Room 101 ................... 619-594-5842
Also advising in:
Compact Scholars Program ................................619-594-0474
Interdisciplinary Studies in Three Departments ...619-594-5842
Liberal Studies (Administration, Room 101)......619-594-5842
OR 619-594-0597
Undeclared Students.........................................619-594-5842
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.

## IMPERIAL VALLEY CAMPUS ADVISING

It is recommended that Imperial Valley Campus students see an adviser prior to registration each semester. Call 760-768-5502 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 Disability Services Norma Aguilar.
..760-768-5637
History, Liberal Studies, Social Science Americo Yacopi. $.760-768-5603$
International Business, Spanish
Aracely Bojorquez ....................................................760-768-5506

Latin American Studies, Mathematics, Public Administration
Miguel Rahiotis..........................................................760-768-5502
Nursing
Helina Hoyt................................................................760-768-5680
Psychology
Barbara Romero.........................................................760-768-5509

## Graduate

MA in Education Betty Wong..
$.760-768-5551$
Master of Public Administration Shawn T. Flanigan (San Diego campus)....................619-594-4339
Teacher Education, Division of Education Betty Wong. .760-768-5551

# Admission and Registration 

## Admission criteria listed in this catalog is for fall 2015. For the most up-to-date admission criteria, visit the SDSU Office of Admissions website at http://www.sdsu.edu/admissions.

## 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 <br> Fall Semester <br> 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. Applying online via http://www.csumentor.edu is expected unless electronic submission is impossible. Application in "hard copy" form may be obtained online via http://www.csumentor.edu as a portable data format (PDF). Application forms (in PDF) may also be downloaded from http://www.calstate.edu/sas/publications. Paper applications should be mailed to the SDSU Office of Admissions. The $\$ 55$ nonrefundable application fee must be paid by credit card or in the form of a check or money order payable to the California State University and may not be transferred or used to apply to another term. The applications of persons denied admission to an impacted campus may be re-routed to another campus, 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 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 AA-T or AS-T degree, 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. 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 the individual campuses to screen applicants are made available by the campuses to all applicants seeking admission to an impacted program. Details regarding the supplemental admissions criteria are also provided at http://www.calstate.edu/impactioninfo.shtml.

## 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 Developmen (GED), or have passed the California High School Proficiency Examination (CHSPE). Students will be admitted to the pre-major (including undeclared) in which they applied. There will be a limited number of enrollment slots in each pre-major. 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) by the end of spring 2015.

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). SDSU service-area applicants will be assigned a credit to increase their eligibility so SDSU can maintain its traditional balance of out-of-area to in-area students.

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

## 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 mathematics and critical reading scores 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 not 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://www.sdsu.edu/testoffice. Or, contact the testing agencies at:

| The College Board (SAT) Program | ACT Records |
| :--- | :--- |
| P.O. Box 8057 | P.O. Box 451 |
| Mount Vernon, Illinois 62864 | lowa City, Iowa 52243-0451 |
| 866-756-7346 | 319-337-1313 |
| http://www.collegeboard.org | http://www.actstudent.org |
| SDSU Code: 4682 | 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 (EI) is the combination of the high school grade point average and scores on either the ACT or SAT. Grade point averages (GPA) are 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; B, 4 points; and C, 3 points. No honor points are given for D or F grades.

A CSU eligibility index can be calculated by multiplying a grade point average by 800 and adding a total score on the mathematics and critical reading scores of the SAT. For students who took the ACT, multiply the grade point average by 200 and add ten 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 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 (SAT) or 842 (ACT). The eligibility index may be higher for impacted CSU campuses

The CSU uses only the ACT score or the SAT mathematics and critical reading scores in its admission eligibility equation. The university has no current plans to include the writing scores from either of the admissions tests in the computation of the CSU eligibility index.

## 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;
3. Three years of mathematics (algebra, geometry, and intermediate algebra);
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 (year-long approved course in a single subject area, i.e. Art I and Art II); 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).

## Early Notification of Admission

The university may offer early notification of admission to first-time 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 residentfirst-time freshmen admitted to San Diego State University who have remediation needs in English or mathematics will be required to enroll in the Freshman Academic Success Track (FAST) program in the summer prior to fall enrollment. The FAST program is mandatory. All students attending a CSU who need remediation are required to participate in Early Start or a summer program such as FAST to better prepare them in English and mathematics.

The goals of the FAST program are to:

- Better prepare students in English 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/collegeready.

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 Education-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 enrollment pressures, many 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 2014 for fall 2015 admission. Submit a supplemental application at http://www.sdsu.edu/portal, which is due by 11:59 p.m. (PST), January 23, 2015.
2. Complete a minimum of 60 transferable semester units by the end of spring 2015. 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 C or higher grade in each course by the end of spring 2015.
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 2015.
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 2015.
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 2015. 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 2015 for fall 2015 admission).
NOTE:
- The Transfer Admission Guarantee does not apply to applicants to athletic training, music and dance, nursing, television, film and new media, theatre arts with an emphasis in performance: acting and musical theatre, or any major for which there is an SDSU approved STAR Act (Associate in Arts for Transfer (AA-T)/ Associate in Science for Transfer (AS-T) degree.
- Nursing applicants must complete a Nursing Program application and meet additional ranking criteria. See the School of Nursing website at http://nursing.sdsu.edu for details.
- Music and Dance applicants must audition for acceptance to the major. For details, see the School of Music and Dance website at http://music.sdsu.edu
- SDSU is onTy 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 a clear transfer preparation and admission pathway to the CSU degree majors.

California Community College 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 transter applicants when applying to a local CSU campus, or non-impacted CSU program. AA-T or AS-T admission applicants are given priority consideration 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-S/ 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 CSUMentor 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 baccalaureate-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. Possessesahigh school diploma(orhasestablished 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 grade point average of $C$ 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 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 the California State University to establish 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 http://www.sdsu.edu/appeals.

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 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 http://www.sdsu.edu/admissions 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 important considerations for admission.

International students who plan to attend SDSU on an F-1 student visa and have course work completed at schools outside the U.S. should complete the CSUMentor international application to apply for admission.

SDSU will begin accepting applications October 1 for admission from first-time 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. SDSU is not accepting applications from lower division transfers (1-59 transferable units) or those seeking a second bachelor's degree other than nursing. The deadline for fall 2015 undergraduate admission applications is November 30, 2014, for students who have attended U.S. schools and May 1, 2015, for students transferring directly from international schools. Because SDSU will begin sending notices of admission in early spring 2015, students are encouraged to apply as early as possible.

## 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 CSUMentor 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 submit a separate application to the School of Nursing in addition to the CSUMentor application. The deadline for both the CSUMentor application and application to the School of Nursing is November 30. 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: acting and musical theatre) 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.
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 to 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 foreign students is limited. All admitted foreign 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 two 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). Some majors may require a higher score. Some campuses may also use alternative methods of assessing English fluency.

## 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 all high schools 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 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) transcripts 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 of spring term grades.


## Transfers

- May 1 - transcripts including fall term grades and work in progress.
- June 30 - transcripts of 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.csumentor.edu 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 $\$ 55$ nonrefundable application fee. Applicants for post-baccalaureate programs are limited to the choice of a single CSU campus on each application. In the event that a post-baccalaureate applicant wishes to be assured of initial consideration by more than one campus, it will be necessary to submit separate applications (including fees) to each campus. 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 and examination scores to Graduate Admissions only. Students are required to apply online. Online applications are available at http://www.csumentor.edu

Paper applications are no longer printed for general distribution. If an applicant does not have access to a computer or in the case of other extenuating circumstances preventing an applicant from filing an electronic admission application, the applicant should contact Graduate Admissions to make special arrangements.

## 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 California State University 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 in a professional education or a certificate program 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). 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 2014 for fall 2015. They must file an electronic CSU Undergraduate Admission Application available at http://www.csumentor.edu.
2. Applicants must complete a nursing program application and meet additional ranking criteria. See the School of Nursing website at http://nursing.sdsu.edu.
3. Applicants are subject to admission related deadlines for undergraduate transfer students.
4. Applicants must have previously earned a baccalaureate degree from a college/university accredited by a regional accrediting association.
5. 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.
6. 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 2015 for fall 2015.

7. 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.
8. 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:

- 2.00 minimum SDSU grade point average based on all courses attempted at SDSU.
- 2.00 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:
- Competency requirements for the CSU Entry Level Mathematics Test (ELM) and CSU English Placement Test (EPT);
- 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 Concurrent 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. Many online courses at CSU campus are available for concurrent enrollment.

## 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.

## 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 "Courses and Curricula by Department" 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://www.calstate.edu/ sas/impaction-campus-info.shtml and via http://www.csumentor.edu. Information about the supplementary criteria is also provided to program applicants. For further information visit http://arweb.sdsu. edu/es/advising/impaction.html.

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.

## Registration and Requirements for Registration

## Registration

San Diego State University students register online through the SDSU WebPortal at http://www.sdsu.edu/portal. On campus and telephone registration are not available. 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: EPT (English Placement Test); ELM (Entry-Level Mathematics Examination); GSP (Grammar, Spelling and Punctuation Test); and WPA (Writing Placement Assessment).

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.

Late Registration. Late registration is allowed during the schedule adjustment period each semester. Students wishing to register late must pay registration fees plus a $\$ 25.00$ late fee by $3: 30 \mathrm{p} . \mathrm{m}$. on the 10 th day from the first day of classes. After receiving an add code from the instructor of the course the student wants to add, the student must access the SDSU WebPortal to officially register. The last day to add/drop classes is by 11:59 p.m. 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 Policy. The schedule adjustment period allows you to drop a course, add a course, withdraw from the university, and change the grading basis of a course. The schedule adjustment deadline is at $11: 59$ p.m. on the 10th day from the first day of classes. You are not allowed to make any schedule adjustments after this deadline and are responsible for knowing the current semester's date for this deadline, which can be found on the academic calendar and the Class Schedule registration notice. Summer deadlines will vary by session. Consult the Class Schedule for specific dates.

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. To reenroll, the student must receive an add code from the instructor and reenroll in the course by 11:59 p.m. on the 10th day from the first day of classes. Summer deadlines will 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.

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. Undergraduates 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.

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.

## Statewide Placement Test Requirements

San Diego State University requires that each entering undergraduate, except those who qualify for an exemption, take the CSU Entry Level Mathematics (ELM) examination and the CSU English Placement Test (EPT) prior to enrollment. Admitted freshmen must take the ELM/EPT (if required) by the May test date prior to enrollment. These examinations are designed to identify entering students who may need additional support in acquiring college entry-level English and mathematics skills necessary to succeed in CSU baccalaureatelevel courses. Undergraduate students who do not demonstrate college-level skills both in English and in mathematics will be placed in appropriate remedial programs and activities during the first term of their enrollment. Students placed in remedial programs in either English or mathematics must complete all remediation in their first year of enrollment. Students who do not successfully complete their remediation requirements within one year of their initial enrollment will be administratively disqualified.

Students register for the EPT and/or ELM through the Student Testing office. Questions about test dates and registration materials may be addressed to the Prospective Student Center.

English Placement Test (EPT). The English Placement Test (EPT) is designed to assess the level of reading and writing skills of students entering the California State University. The CSU EPT must be completed by all non-exempt entering undergraduates prior to enrollment in any course, including remedial courses. Students who score 147 or above on the EPT will be placed in college-level composition classes.

Exemptions from the EPT are granted only to those who present proof of one of the following:

- A score of "Exempt" or "Ready for college-level English courses" on the CSU Early Assessment Program (EAP) taken along with the English Language Arts California Standard Test in grade 11.
- A score of "Conditionally Ready for College-Level English Courses" or "Conditional" on the CSU Early Assessment Program (EAP) taken in grade 11, provided successful completion of the Expository Reading and Writing Course (ERWC), AP English, IB English, or an English course approved for extra honors weight on the University of California "a-g" Doorways course list.
- A score of 500 or above on the critical reading section of the College Board SAT Reasoning Test.
- A score of 22 or above on the American College Testing (ACT) English Test.
- A score of 3 or above on either the Language and Composition or Composition and Literature examination of the College Board Scholastic Advanced Placement Program.
- A score of 4-7 on the Higher Level English A1 International Baccalaureate examination.
- Completion and transfer to CSU of the credits for a college course that satisfies the CSU General Education requirement in English Composition, provided such a course was completed with a grade of $C$ or better.

Entry Level Mathematics (ELM) Examination. The Entry Level Mathematics (ELM) Examination is designed to assess and measure the level of mathematics skills acquired through three years of rigorous college preparatory mathematics coursework (Algebra I and II, and Geometry) of students entering the California State University (CSU). The CSU ELM must be completed by all non-exempt entering undergraduates prior to enrollment in any course, including remedial courses. Students who score 50 or above on the ELM will be placed in college-level mathematics classes.

Exemptions from the ELM are granted only to those who present proof of one of the following:

- A score of "Exempt" or "Ready for college-level Mathematics courses" on the CSU Early Assessment Program (EAP), taken in grade 11 in conjunction with the CST in Summative High School Mathematics or Algebra II.
- A score of "Conditionally Ready for College-Level Mathematics Courses" or "Conditional" on the CSU Early Assessment Program (EAP) taken in grade 11 along with the California Standards Test in Summative High School

Mathematics or Algebra II, provided successful completion of a CSU-approved 12th grade mathematics course that require Algebra Il as a prerequisite.

- A score of 550 or above on the mathematics section of the College Board SAT Reasoning Test.
- A score of 550 or above on a College Board SAT Subject Test in Mathematics (level 1 or level 2).
- A score of 23 or above on the American College Testing (ACT) Mathematics Test.
- A score of 3 or above on the College Board Advanced Placement Calculus AB or Calculus BC examination.
- A score of 3 or above on the College Board Advanced Placement Statistics examination.
- Completion and transfer to CSU of a college course that satisfies the requirement in Quantitative Reasoning, provided such a course was completed with a grade of $C$ or better.


## Determination of Residency for Tuition Purposes

University requirements for establishing residency for tuition purposes are independent from those of other types of residency, 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 tuition on an in-state or out-of-state basis. 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 (CSU) are California Education Code sections 6800068085, 68120-68134, and 89705-89707.5, and California Code of Regulations, Title 5, Subchapter 5, Article 4, sections 41900-41916. This material can be viewed on the Internet by accessing the CSU website at http://www.calstate.edu/GC/resources.shtml.

The Office of Admissions is responsible for determining the residency status of all new and returning students based on the Application for Admission and the Residency Questionnaire. The Office of the Registrar determines residency status for currently enrolled students using the Reclassification Request Form, and, as necessary, other evidence furnished by the student. A student who fails to submit adequate information to establish eligibility for resident classification will be classified as a nonresident.

Generally, establishing California residency for tuition purposes requires a combination of physical presence and intent to remain indefinitely. An adult who, at least 366 days prior to the residency determination date for the term in which enrollment is contemplated, can demonstrate both physical presence in the state combined with evidence of intent to remain in California indefinitely may establish California residency for tuition purposes. A minor normally derives residency from the parent(s) they reside with or most recently resided with.

Evidence demonstrating intent may vary from case to case but will include, and is not limited to, the absence of residential ties to any other state, California voter registration and 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 an apartment 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.

Nonresident students seeking reclassification are required to complete a supplemental questionnaire that includes questions concerning their financial independence. Financial independence is required, along with physical presence and intent, to be eligible for reclassification. Financial independence is established if in the calendar year the reclassification application is made and in any of the three calendar years preceding the reclassification application the student:

- has not and will not be claimed as an exemption for state and federal tax purposes by his/her parent;
- has not and will not receive more than seven hundred and fifty dollars (\$750) per year in financial assistance from his/her parent; and
- has not lived and will not live longer than six (6) weeks in the home of his/her parent.

A nonresident student who has been appointed as a graduate student teaching assistant, a graduate student research assistant, or a graduate student teaching associate on any CSU campus and is employed on a 0.49 or more time basis is exempt from the financial independence requirement.

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.

Exceptions to the general residency requirements are contained in California Education Code sections 68070-68085 and California Code of Regulations, Title 5, Subchapter 5, Article 4, sections 4190641906.6, and include, but are not limited to, certain members of the military and their dependents, certain credentialed employees of school districts and most students who have attended three or more years of high school in California and graduated from a California high school or attained the equivalent of graduation. Whether an exception applies to a particular student cannot be determined before the submission of an application for admission and, as necessary, additional supporting documentation. Because neither campus nor Chancellor's Office staff may give advice on the application of these laws, 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 |

Students classified as non-residents may appeal a final campus decision within 120 days of notification by the campus. A campus residency classification appeal must be in writing and submitted to:

The California State University
Office of General Counsel
401 Golden Shore, 4th Floor
Long Beach, CA 90802-4210
The Office of General Counsel can either decide the appeal or send the matter back to the campus for further review. Students incorrectly classified as residents or incorrectly granted an exception from nonresident tuition are subject to reclassification as nonresidents and payment of nonresident tuition in arrears. If incorrect classification results from false or concealed facts, the student is also subject to discipline pursuant to Section 41301 of Title 5 of the California Code of Regulations.

Resident students who become nonresidents or who no longer meet the criteria for an exception must immediately notify the Office of the Registrar. 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 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 and 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 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 and Rubella. All new and readmitted students must provide proof of full immunization against measles and rubella prior to enrollment.

Hepatitis 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 or have special circumstances, please consult Student Health Services at 619-594-5281 or visit http://shs.sdsu.edu.

Meningococcal Disease Information. Each incoming freshman who will be residing in on-campus housing will be required to return a form indicating that they have received information about meningococcal disease and the availability of the vaccine to prevent contracting the disease and indicating whether or not the student has chosen to receive the vaccination.

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


The CSU makes every effort to keep student costs to a minimum. Fees listed in published schedules or student accounts may need to be increased when public funding is inadequate. Therefore, CSU must reserve the right, even after fees are initially charged or initial fee payments are made, to increase or modify any listed fees. All listed fees, other than mandatory systemwide fees, are subject to change without notice, until the date when instruction for a particular semester or quarter has begun. All cSU listed fees should be regarded as estimates that are subject to change upon approvalby the Board of Trustees, the Chancellor, or the Presidents, as appropriate. Changes in mandatory systemwide fees will be made in accordance with the requirements of the Working Families Student Fee Transparency and Accountability Act (Sections 66028-66028.6 of the Education Code).
For updated information regarding the fee structure for 2015-2016 refer to the online Class Schedule or Student Account Services website at http://www.sdsu.edu/sas.

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. Checks to be made payable to SDSU. Do not enclose cash.

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 http://www. sdsu.edu/sas and see Online Student Account Services.

In cooperation with SDSU, CASHNet ${ }^{\text {TM }}$ SmartPay allows students to pay their tuition and fees and/or out-of-state tuition with MasterCard, Discover Card, or American Express card. CASHNet ${ }^{\text {TM }}$ SmartPay is accessed directly from your online student account. Visit the Student Account Services website at http://www.sdsu.edu/sas and see Online Student Account Services.

Payments made via CASHNet ${ }^{\text {TM }}$ SmartPay are received by Student Account Services no later than the next business day, so the registration process is not delayed. CASHNet ${ }^{T M}$ 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 fees. These fees are subject to change. Fee payment information and instructions are in Money Matters available at http://www.sdsu.edu/sas.

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 2015/SPRING 2016, Per Semester |  |
| :---: | :---: |
| Units Attempted | Basic Tuition and Fees Undergraduate |
| 0 units - 6.0 units | .. \$2,339.00 |
| 6.1 or more units. | \$3,488.00 |
|  | Graduate |
| 0 units - 6.0 units | \$2,705.00 |
| 6.1 or more units. | \$4,121.00 |
| Teaching Credential Candidates |  |
| 0 units - 6.0 units | ............... \$2,594.00 |
| 6.1 or more units. | \$3,926.00 |


| Units Attempted | Basic Tuition and Fees |
| :---: | :---: |
| Education Doctoral Students * |  |
| 0 units - 6.0 units | \$6,311.00 |
| 6.1 or more units. | \$6,311.00 |
| Nursing Doctoral Students * |  |
| 0 units - 6.0 units | ...... \$7,922.00 |
| 6.1 or more units. | \$7,922.00 |
| Physical Therapy Doctoral Students * |  |
| 0 units - 6.0 units | \$8,826.00 |
| 6.1 or more units. | \$8,826.00 |

## * Does not include joint doctoral students.

Tuition and fees above include a Student Body Association Fee of $\$ 35.00$, a Student Union Fee of $\$ 237.00$, a Health Facilities Fee of $\$ 25.00$, an Instructionally Related Activities Fee of \$180.00, a Health Services Fee of \$150.00, a Library Use Fee of \$25.00, a Student Success Fee of \$100.00, and a Basic Tuition Fee of either \$1,587.00 or $\$ 2,736.00$ for undergraduate students, $\$ 1,953.00$ or $\$ 3,369.00$ for graduate students, $\$ 1,842.00$ or $\$ 3,174.00$ for teaching credential candidates, or \$5,559.00 for education doctoral students, \$7,170.00 for nursing doctoral students, or \$8,074.00 for physical therapy doctoral students, depending on unit load.

Imperial Valley Campus students pay a Student Body Association Fee of $\$ 65.00$, a Student Union 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 $\$ 15.00$. Imperial Valley Campus students do not pay the Library Use Fee. See Imperial Valley Campus 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 "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.

## PROFESSIONAL PROGRAM FEE

Graduate students in the College of Business must pay an additional $\$ 254.00$ 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 <br> (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..
$\$ 372.00$
(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
$\$ 700.00$

## 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:

|  | Living off Campus | Living on Campus | Commuting from Home |
| :---: | :---: | :---: | :---: |
| Basic tuition and fees | \$6,976 | \$6,976 | \$6,976 |
| Books and supplies | 1,804 | 1,804 | 1,804 |
| Food and housing | 11,444 | 15,826 | 4,197 |
| Transportation | 1,864 | 1,454 | 1,499 |
| Miscellaneous/Personal | 1,392 | 1,392 | 1,392 |
| Total | \$23,480 | \$27,452 | \$15,868 |

The academic year basic tuition and fees for teacher credential students are $\$ 7,852$. Basic tuition and fees are $\$ 8,242$ for postbaccalaureate students, $\$ 12,622$ for education doctoral (Ed.D.) students, and \$17,652 for physical therapy doctoral students. Graduate business students in selected degree programs pay an additional $\$ 254$ per unit (refer to the Professional Program Fee information). Nonresident tuition is an additional $\$ 372$ per unit.

## All fees and costs are subject to change without notice.

The California State University (CSU) makes every effort to keep student costs to a minimum. Fees listed in published schedules or student accounts may need to be increased when public funding is inadequate. Therefore, CSU must reserve the right, even after initial fee payments are made, to increase or modify any listed fees, without notice, until the date when instruction for a particular semester has begun. All CSU listed fees should be regarded as estimates that are subject to change upon approval by the Board of Trustees.

## PARKING FEES

Nonreserved parking space, per semester ........................... \$135.00
Less than four-wheeled, self-propelled vehicle
(motorcycle, moped)
Combined student/overnight parking surcharge,
per semester
..................................................
. $\$ 213.00$
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 Disability Services Office (Calpulli Center, Room 3101).

## MISCELLANEOUS FEES

(Fees payable when service is rendered.)
Application for admission or readmission (NONREFUNDABLE) .......................................................... \$55.00
Athletic cheer team membership fee (fee range based on planned competitions and available resources) .... \$500 to \$1,500
Athletic winter guard membership fee (fee range based on yearly travel plans)
. $\$ 600$ to $\$ 1,500$
Counseling Diversion Program fee........................................... $\$ 100.00$
Counseling Diversion Program fee (missed appointment) ....... \$30.00
Credential application fee* ........................................................ $\$ 55.00$
Credential evaluation fee ......................................................... $\$ 25.00$
Diploma replacement fee ........................................................ $\$ 12.00$
Document copying fee (per page)............................................. $\$ 1.00$
Enrollment confirmation deposit (NONREFUNDABLE) .......... $\$ 400.00$

| Fingerprinting fee (live scan) plus applicable DOJ and FBI fees | \$20.00 |
| :---: | :---: |
| Graduation services fee | \$55.00 |
| Interest inventory assessment fee | \$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) | \$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)

(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 Applicationprocessing/advising fee $\$ 25.00$
Tow fee ..... \$150.00
Towel fee (optional) .....  $\$ 4.00$
Transcript of record, official (per transcript) .....  7.00
Official Transcript of Record - On Demand (per transcript)
( $\$ 20.00$ for first transcript and $\$ 5.00$ for each additional ondemand transcript printed at the same time.) . 20.00
Tuition (Foreign and Out-of-State) installment plan
service charge ........... Equal to 15\% of each installment payment
Vehicle boot fee .....  $\$ 150.00$

* Established by and payable to the California Commission on Teacher Credentialing.

** Late fee also charged when applicable.

## 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 http://www. sdsu.edu/sas 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 $15 \%$ service charge applied to each installment payment. Additional information and instructions are available on the Student Account Services website at http://www.sdsu.edu/sas.

## 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 ${ }^{\text {TM }}$ 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. 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-of-state 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 MANDATORY FEES, INCLUDING NONRESIDENT TUITION

Regulations governing the refund of 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 California State University. Refunds of tuition and fees charges for self-support, special session, and extended education programs or courses at the California State University are governed by a separate policy established by the university, available at http://www.sdsu.edu/sas.

In order to receive a full refund of 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 http://www.sdsu.edu/registrar.

For state-supported semesters, quarters, and non-standard terms or courses of four (4) 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 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 the 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 (4) weeks, no refunds of mandatory fees and 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 (4) weeks.

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

- The fees were assessed or collected in error;
- The course for which the 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 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 tuition and fees 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
- Federal Perkins 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.

## 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.

Nonreserved space per semester:
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 .. None

Your parking permit must be turned in to Student Account Services at the time you file your refund application. Refund applications are available at Student Account Services. 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 register during Late Registration. 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 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 regarding any required return or repayment of grant or loan assistance received for that academic term or payment period. 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.

## COLLEGE OF EXTENDED STUDIES COURSE FEES

Refer to College of Extended Studies 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 for more information.

## FEE WAIVERS AND EXEMPTIONS

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

Section 66025.3-Qualifying children, spouses/registered domestic partners, or unmarried surviving spouses/registered domestic partners of a war period veteran of the U.S. military who is totally service-connected disabled or who died as a result of service-related causes; children of any veteran of the U.S. military who has a service-connected disability, was killed in action, or died of a service-connected disability and meets specified income provisions; any dependents or surviving spouse/registered domestic partner who has not remarried of a member of the California National Guard who in the line of duty and in active service of the state was killed or became permanently disabled or died of a disability as a result of an event while in active service of the state; and undergraduate students who are the recipient of or the child of a recipient of a Congressional Medal of Honor and meet certain age and income restrictions;

Section 68120 - Qualifying children and surviving spouses/registered domestic partners of deceased public law enforcement or fire suppression employees who were California residents and who were killed in the course of active law enforcement or fire suppression duties (referred to as Alan Pattee Scholarships); and

Section 68121 - Qualifying students enrolled in an undergraduate program who are 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 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.

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

Section 68122 - Students who are victims of trafficking, domestic violence, and other serious crimes who have been granted $T$ or $U$ visa status are exempt from paying nonresident tuition if they (1) attended high school in California for three or more years; (2) graduated from a California high school or attained the equivalent; and (3) registered as an entering student or are currently enrolled at a CSU campus.

Section 68130.5 - Students who are not residents of California are exempt from paying nonresident tuition if they (1) attended high school in California for three or more years; (2) graduated from a California high school or attained the equivalent; and (3) registered as an entering student or are currently enrolled at a CSU campus. In addition, students without lawful immigration status will be required to file an affidavit stating that they have filed an application to legalize their immigration status, or will file an application as soon as they are eligible to do so. This exemption from paying nonresident tuition does not apply to students who are nonimmigrant aliens within the meaning of 8 U.S.C. 1101(a)(15), except as provided by Section 68122 above.

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 $\$ 55$ 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 ABOLISH-

## MENT 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. Student body association fees support a variety of cultural and recreational programs, child care centers, and special student support programs.

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 CSU Executive Order 1054, Section III. The university president may use alternative 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, 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 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 fees including any tuition for the reservation of space in the course.

The institution may withhold permission to register or to receive official transcripts of grades or 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 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.

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 3605, 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 January 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. Since new California grant program applicants must apply by March 2, we strongly encourage all applicants to apply by this date.

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/.

Applications are reviewed and aid awarded throughout the year based on available funding. To receive first priority evaluation of your eligibility for all financial aid programs, complete the FAFSA by March 2 and, by April 1, submit all financial aid documents requested. An application and documents submitted after these dates will receive second priority evaluation and aid awarded based on available funding at the time.

## 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 2015-2016 Academic Year

|  | Living off <br> Campus | Living on <br> Campus | Commuting <br> from Home |
| :---: | ---: | ---: | ---: |
| Basic tuition and fees ............ | $\$ 6,976$ | $\$ 6,976$ | $\$ 6,976$ |
| Books and supplies ............. | 1,804 | 1,804 | 1,804 |
| Food and housing ................ | 11,444 | 15,826 | 4,197 |
| Transportation ................... | 1,864 | 1,454 | 1,499 |
| Miscellaneous/Personal ........ | $\mathbf{1 , 3 9 2}$ | $\mathbf{1 , 3 9 2}$ | 1,392 |
| $\quad$ Total ............................. | $\$ 23,480$ | $\$ 27,452$ | $\$ 15,868$ |

The academic year basic tuition and fees for teacher credentia students are $\$ 7,852$. Basic tuition and fees are $\$ 8,242$ for postbaccalaureate students, $\$ 12,622$ for education doctoral (Ed.D.) students, and $\$ 17,652$ for physical therapy doctoral students. Graduate business students in selected degree programs pay an additional $\$ 254$ per unit (refer to the Professional Program Fee information). Nonresident tuition is an additional $\$ 372$ per unit.

## All fees and costs are subject to change without notice.

The California State University (CSU) makes every effort to keep student costs to a minimum. Fees listed in published schedules or student accounts may need to be increased when public funding is inadequate. Therefore, CSU must reserve the right, even after initial fee payments are made, to increase or modify any listed fees, without notice, until the date when instruction for a particular semester has begun. All CSU listed fees should be regarded as estimates that are subject to change upon approval by the Board of Trustees.

## 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 3605, 619-594-6323.

## E-mail and the Internet

The SDSU Office of Financial Aid and Scholarships uses e-mail and the Internet to communicate with aid applicants about documentation needed, disbursement holds, and awards. Go to the SDSU WebPortal at http://www.sdsu.edu/portal and select E-mail/Address Update to make sure there is a valid e-mail address on record for you. The Office of Financial Aid and Scholarships home page and secure website, AidLink, have been enhanced to streamline the application and award process for SDSU students. Use AidLink at http://www. sdsu.edu/financialaid to view your personal financial aid information, download and print documents you need to submit, activate your student loan, and more.

## 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 s 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 as many scholarships as possible

Application materials and eligibility information can be accessed on the SDSU Office of Financial Aid and Scholarships website at http:// www.sdsu.edu/financialaid. Deadlines vary and new scholarship opportunities are added to the website throughout the year. Students should check the website regularly to learn about continuing and upcoming scholarship opportunities, application and essay writing tips, and more

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. Eligibility and application information is available on the Office of Financial Aid and Scholarships website at
http://www.sdsu.edu/financialaid.

## Other Scholarship Resources and Links

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 receive fellowships or traineeships through the various departments. Federal, state, and private industry supporting programs of this nature are largely directed to students doing graduate work or to students preparing for some special field of work. 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.

# Student Services 

## Division of Student Affairs

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
Center for Intercultural Relations
Compact for Success
Counseling \& Psychological Services
Educational Opportunity Programs/Ethnic Affairs (EOP)
Financial Aid and Scholarships
Fraternity and Sorority Life
Health Promotion
International Student Center/SDSU Study Abroad
New Student and Parent Programs
Ombudsman
Residential Education
Student Disability Services
Student Health Services
Student Life \& Leadership
Student Rights \& Responsibilities
Testing Services

## Career Services

Student Services East, Room 1200

## 619-594-6851

## http://career.sdsu.edu

Career Services is the central campus resource for career development and employment opportunities. The center provides a full range of programming, resources, and opportunities that support student success. Primary services and resources include the following

## Career Counseling

Career counselors guide students on topics that range from choosing a major, to locating and applying for internships, to finding summer jobs and full-time employment. Career counselors work with students to assess their professional strengths, to develop skills such as resume writing and job interviewing, and to connect students to professional communities. They also work with students to manage the use of ever-expanding online resources and social media.

## Aztec Career Connection

Students develop successful careers by having an online presence. Career Services provides SDSU students with Aztec Career Connection, the SDSU online portal for identifying and pursuing employment opportunities. Aztec Career Connection can be found by visiting the Career Services homepage at http://career.sdsu.edu. This robust resource lists many jobs, internships, and on-campus interviewing opportunities. It also provides outstanding online resources for career development. These exclusive online resources include:

- TypeFocus - career assessment and planning;
- Perfect Interview - practice interviewing;
- Going Global - a resource for working abroad;
- Strong Interest Inventory - career assessment (fee-based).

To register on Aztec Career Connection, students use their SDSU RedID number as their username and password to create an account.

## Internships and Employment Opportunities

Career Services serves as the central campus resource for internships. The center partners with academic areas, employers, and the CSU system to provide internships, part-time jobs, and summer employment. It also manages a centralized resource of full-time jobs, and volunteer opportunities. 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.

## Career Fairs and On-Campus Interviews

Career Services provides career fairs throughout each academic year. These fairs range in size and scope. Students can visit Aztec Career Connection for a schedule of events. In addition to career fairs, Career Services brings employers to campus throughout the year to conduct on-campus interviews. On-campus interviews provide a unique opportunity for SDSU students to meet employers on campus at Career Services and interview for full-time and internship opportunities. On-campus interviewing networking gives students a competitive advantage in their job searches.

## Career Resource Room

Career Services offers students a space in which to explore career options. In the Career Resource Room, computer stations provide access to assessments, Aztec Career Connection and software for developing resumes and other professional correspondence. 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. Reading and working spaces allow students to use many resources and interact with student assistants and peer advisers in the center.

## 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, Student Disability Services, Student Life and Leadership, Academic Advising, Associated Students, and the Alumni Association. WorkAbility IV is an award-winning partnership with Student Disability Services and the State Department of Rehabilitation. This service provides career-focused support to qualified students. Visit Career Services or Student Disability Services 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 system.

## Visit the Career Center

Career Services 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. Fast-15 walk-in appointments are held daily. Visit the center's website for current schedule information. SDSU alumni are offered services for a fee. For more information, please contact Career Services.

## Center for Intercultural Relations

## Conrad Prebys Aztec Student Union, Room 250 619-594-7057 <br> http://studentaffairs.sdsu.edu/intercultural

The Center for Intercultural Relations researches, designs, and implements unique programs that promote the appreciation of cultural diversity and fosters intercultural and cross-cultural understanding.

The center provides programs and services that support the academic mission of the university by enhancing the educational personal, cultural, and social development of students. Intercultural Relations strives to build positive advocacy and collaborative relationships with the general student body with special emphasis towards 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.

## Compact for Success

Student Services East, Room 2109

## 619-594-0732

## http://compactforsuccess.sdsu.edu

San Diego State University partners with the Sweetwater Union High School District (SUHSD) to promote a program that brings educational opportunities to Sweetwater graduates.

The partnership involves SUHSD teachers working side-by-side with SDSU faculty to examine the rigor and alignment of English and mathematics course offerings and designs a school curriculum that meets specific requirements for college admissions.

Students participating in the Compact for Success program focus on meeting five benchmarks. These students would be guaranteed admission to SDSU.

The Compact for Success officially launched in 2000, with the first group of seventh grade students enrolled in the program. In fall 2006, 203 of these students began their freshman year at SDSU. Today, the nationally recognized, award-winning program has increased Sweetwater's college-going population by 120 percent.

The primary elements of the program are to:

- Institute academic rigor in the secondary schools that will better prepare students to be college-ready;
- Provide guaranteed admission to SDSU upon successful completion of the required benchmarks;
- Provide support to Compact Scholars and other SUHSD students so they can be successful at SDSU;
- Provide financial aid to Compact Scholars who are eligible.

The Compact for Success shows students the path they need to follow to attend a college or university and to provide the support necessary to assure success at SDSU.

## 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.

Individual counseling services are designed for students who can benefit from short-term therapy. Often, a few individual meetings with a therapist can help better identify, understand, and resolve emotional barriers that may be interfering with personal well-being and academic success. These confidential services are for SDSU students at no cost. If a student's situation requires longer-term therapy, referrals can be made to off-campus resources.

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

- Alcoholics Anonymous
- Grief and Loss
- Managing Anxiety
- Mindfulness Meditation
- Relationship Skills
- Stress Management

Telephone consultation services are also provided. If a student has a personal concern, or is concerned about a friend, a therapist will talk directly with the student by telephone for a brief consultation. This conversation will allow the therapist to hear concerns and help identify the best way to help. Faculty and staff may also avail themselves of this service when concerned about a student. Therapists are generally available for consultation during business hours from 9 a.m. to 4 p.m., with the exception of the noon hour. Referrals to San Diego's free 24-hour counseling access line at 1-800-479-3339 are also provided.

Crisis intervention services are also 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, urgent appointments may be provided. Examples of urgent situations may include: thinking about suicide, a recent victim of assault, grieving the recent loss of a friend or family member.

The Center for Well-Being offers resources designed to help students help themselves. Seven stations are set up to promote health and personal growth, including a Biofeedback Station, hands-on activities that promote relaxation and stress reduction, pamphlets, books, audio and video tapes addressing topics such as: adult children of alcoholics, adults molested as children, assertiveness,
coming out, concentration, depression, eating disorders, loneliness, motivation, relationships, self-confidence, sexual assault, stress reduction, suicide prevention, time management. The Alpha Chamber
"Egg Chair" can teach your body and mind to relax. The "Egg Chair" provides an environment where students experience deep relaxation, both mentally and physically.

Other services available at C\&PS include:

- Biofeedback Clinic for stress reduction;
- Bounce Back - course designed to help students on academic probation;
- ASPIRE - individualized program designed for students to deal with substance use;
- Online Resources - intervention and assessment tools for anxiety, depression, disordered eating, alcohol and other substance use, trauma, stress, and relationships;
- Groups and Workshops - COPE, Mindfulness Meditation, Living with Loss, Successful Community Living, Alcoholics Anonymous, Transfer Student Support Group.
The C\&PS peer educators offer students who are selected, trained and supervised an opportunity to provide outreach to other students. The C\&PS student advisory board members provide advocacy for students' mental health needs, a service sponsored by SDSU Associated Students.


## Educational Opportunity Program/ Ethnic Affairs (EOP)

Student Services East, Room 2109

## (619) 594-6298

## E-mail: eop-sdsu@mail.sdsu.edu

## http://eop.sdsu.edu

The Educational Opportunity Program/Ethnic Affairs (EOP) is an undergraduate program designed to admit, retain, and graduate historically low income and first generation college students. Eligible first time freshman and transfer students must be California residents and can only be admitted into the program prior to their first semester of attendance at SDSU. The program provides support to students who have the interest and motivation to obtain a college education, but who have not been able to realize their full potential due to economic or educational factors.

Support services are provided throughout the students' undergraduate studies and are designed to ensure academic success. Comprehensive student services provided include outreach and recruitment; preadmission counseling; transitional programs (Summer Bridge and Transfer Bridge); academic advising; probation and disqualification counseling; career guidance; individual tutoring; writing and mathematics laboratories; academic skills and personal development workshops; mentoring; intensive support for former foster and homeless youth; transitional support classes; and an EOP grant. EOP advocates for multi- and cross-cultural activities to enhance the campus climate and increase the awareness of diversity on the campus.

EOP is a program in high demand with a limited number of admission spaces. Applicants who submit all required documents by the established deadlines will be reviewed based on their admission status and eligibility to our program. To apply to EOP, check the appropriate box on the CSU application on CSUMentor, and complete the online EOP application. You may check the EOP website for updated information on all of our programs.

## Fraternity and Sorority Life

## (In the Office of Student Life \& Leadership)

## Conrad Prebys Aztec Student Union, Room 210

## 619-594-5221

## http://studentaffairs.sdsu.edu/sll/greeklife/

Fraternity and Sorority Life oversees all aspects of Greek Life. Greek-letter social organizations create smaller communities within the larger university environment for the purposes of facilitating personal growth, leadership development, and academic support. Fraternities and sororities also offer students opportunities for friendship, small group living, campus involvement, community service, participation in social and recreational activities, and alumni networking. At SDSU there are 13 general fraternities, nine general sororities, four historically African American fraternities and sororities, and 18 culturally based fraternities and sororities. Membership recruitment drives (sometimes referred to as "rush") occur at the beginning of each semester for most organizations, while others have ongoing intake processes.

## Housing Administration and Residential Education

## 6050 Montezuma Road <br> \section*{619-594-5742}

## http://www.sdsu.edu/housing

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 have a better chance of succeeding in college. To suit the varying needs of a diverse and dynamic student population, a variety of living environments are offered convenient to campus facilities. An active residential student government provides residents a chance to gain leadership experience and become involved with their on-campus community.

## Residence Halls

First-time freshmen that graduate from high schools outside the SDSU service-area are required to live in on-campus housing their first year at SDSU. In addition, the university recommends you live in a traditional residence hall your freshman year, a suite-style facility during your sophomore year, and in an on-campus apartment for your junior and senior years.

As a first year student, being an active member in your community and an academically focused student will make your transition to college smoother. The university recommends freshmen live in an academically focused Residential Learning Community (RLC). With approximately one out of four beds in a Residential Learning Community, each RLC is designed around a major or theme. The combination of classes is designed to fit into the student's Major Academic Plans (MAPs). Current learning communities include: Current learning communities include: Business Journey into Entrepreneurship, Discover San Diego, Emerging Leaders Program, Future Education Professionals, Health and Healing Professions, Honors Residential College, Journalism and Media Studies, Language Village, Men Engaging in Technology and Science, Physical Fitness (P-Fit P-Act), Pre-Law, ROTC, Social Activism and Global Environments (SAGE), Toltec House for Undeclared Majors, Women in Science and Engineering, and Visual and Performing Arts (these communities may vary from year to year so check the university website for updates).

First year students can indicate their preference of Residential Learning Community (RLC), room-type, roommate, and whether they want to live in a facility that is open over the academic break periods. Most residential facilities offer triple or double occupancy accommodations for single students. Single rooms are very limited in a few facilities.

Applicants are encouraged to request an on-campus housing license agreement once they have applied for admission to SDSU and have received their SDSU RedID number. Students can do this by going to the "Admission Status" section of their WebPortal account and indicating their interest in on-campus housing. The license agreement includes a meal plan, except for continuing SDSU and transfer students residing in transfer and upper division communities.

## Transfer and Upper Division Communities

Transfer students and other non-first year students can enjoy a program and facilities designed for a little more independence.

If you are looking for housing options while you attend SDSU, you will find information and assistance at the Office of Housing Administration (OHA). Visit http://www.sdsu.edu/housing for a description of the various housing options and more information on the housing application process.

Which Residential Learning Community (RLC) is right for you? Visit our selection website designed for freshman students, http://housing.sdsu.edu/housing/rlc-finder.aspx.

## International Student Center (ISC)

## International Student Center <br> 619-594-1982

http://www.sdsu.edu/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 95 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 homecountry 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.

## International Student Exchanges

In addition to the CSU International Programs, San Diego State University also sponsors semester abroad, dual degree programs, and travel-study programs. SDSU has also entered into special institutional arrangements with selected universities that provide both undergraduate and graduate students the opportunity for study, research, and internships abroad. Currently San Diego State University has student agreements with many international partners. SDSU's International Student Center assists students who wish to participate in an exchange or other SDSU program. For detailed information, contact the International Student Center at 619-594-1982.

For more information about the university's international programs, contact the Office of International Programs, 619-594-1354, e-mail oip@mail.sdsu.edu or visit our website at http://oip.sdsu.edu.

## Study Abroad Students

The International Student Center provides services to all students who want to study abroad as part of their educational experience at SDSU. The ISC serves as SDSU's 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.

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.

The ISC 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. The ISC coordinates all promotion, recruitment, selection, processing, and orientation for the participants from SDSU.

The ISC also assists, in coordination with SDSU's Risk Management Program, that 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.

The ISC 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 1,800 students), ranking the university as 22nd in thee national overall for the number of students studying abroad (source: IIE 2014).

## The California State University International Programs

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 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 special study center abroad. The International Programs 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, the International Programs also offers a wide selection of study abroad destinations and learning environments.

Australia. Griffith University, Macquarie University, Queensland University of Technology, University of Queensland, University of Western Sydney, Victoria University

Canada. Concordia University (Montréal)
Chile. Pontificia Universidad Católica de Chile (Santiago)
China. Peking University (Beijing)
Denmark. Danish Institute for Study Abroad (international education affiliate of the University of Copenhagen)

France. Institut Catholique de Paris, Université d'Aix-Marseille (Aix-en-Provence), 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, and 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-Würtemberg

Ghana. University of Ghana, Legon
Israel. University of Haifa
Italy. CSU Study Center (Florence), Universitá degli Studi di Firenze, Accademia di Belle Arti Firenze

Japan. Waseda University (Tokyo), University of Tsukuba
Korea. Yonsei University (Seoul)
Mexico. Instituto Tecnológico y de Estudios Superiores de Monterrey, Campus Querétaro

South Africa. Nelson Mandela Metropolitan University, Port Elizabeth
Spain. Universidad Complutense de Madrid, Universidad de Granada, Universidad de Jaén

Sweden. Uppsala University
Taiwan. National Taiwan University (Taipei), National Tsing Hua University (Hsinchu)

United Kingdom. Bradford University, Bristol University, Hull University, Kingston University, Swansea University

International Programs pays tuition and administrative costs abroad for participating California resident students to a similar extent that such funds would be expended to support similar costs in California. Participants are responsible for all CSU tuition and program fees, personal costs, such as transportation, room and board, and living expenses. Financial aid, with the exception of Federal WorkStudy, is available to qualified students.

To qualify for admission to the International Programs, in most programs, students must have upper division or graduate standing at a CSU campus by the time of departure. Students at the sophomore level may, however, participate in the intensive language acquisition programs or courses in Canada, China, France, Germany, Korea, Mexico, Sweden and Taiwan. California Community Colleges transfer students are eligible to apply directly from their community colleges. Students must also possess a current cumulative grade point average of 2.75 or 3.0 , depending on the program for which they apply and must fulfill all coursework prerequisites.

Additional information and application materials may be obtained on campus, or by writing to The California State University International Programs, 401 Golden Shore, Sixth Floor, Long Beach, California 90802-4210. Visit our website at http://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@mail.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.
- Email 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.


## Ombudsman

## Student Services East, Room 1105

## 619-594-6578

## http://studentaffairs.sdsu.edu/ombuds

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 ombudsman is an independent and impartial agent who helps individuals and groups seeking the resolution and correction of complaints. The 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 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 Disability Services (SDS)

## Calpulli Center, Room 3101

## 619-594-6473

## http://studentaffairs.sdsu.edu/sds

Student Disability Services provides support services for students with mobility limitations, learning disabilities, hearing or visual impairments, psychological disabilities, attention deficit disorder, and other disabilities. Counselors are available to assist students in making personal, academic, and vocational choices, and to advise how best to utilize campus resources. Prior to receiving assistance, students must furnish appropriate medical or psycho-educational documentation to Student Disability Services.

Services available to SDS students include an assistive computer technology laboratory in Love Library, Room 205, where students may use standard or assistive computer technology and may receive tutoring for their writing. Other services available when appropriate
include priority registration for students demonstrated need; transportation on campus; accessibility information; provision of instructional materials in accessible formats; sign language interpreters or realtime captioning for deaf students; accommodated testing equipment loans (assistive listening devices, communication devices, wheelchairs, etc.); tutoring and note taking services, for mobility orientation, financial benefits, and other services.

In addition, SDS partners with Career Services and the state Department of Rehabilitation to offer enhanced career and employment services to students who are DOR clients through the Workability IV program. SDS is also the recipient of a federal Student Support Services grant to serve at-risk undergraduates with enhanced academic support services to increase retention and graduation rates among students with disabilities.

## Student Health Services

## Calpulli Center <br> 619-594-4325

http://shs.sdsu.edu
All regularly enrolled SDSU students have prepaid a health fee as part of their tuition and fees that entitles them to a wide range of basic medical services. Some services, including many laboratory tests such as Pap smears, immunizations, orthopedic appliances, and medications, require a minimal fee. Charges associated with these services are usually significantly lower than those found elsewhere. We accept California's Family PACT program designed to cover the costs of services to prevent unplanned pregnancies and protect the reproductive health of those who qualify.

Medical care is provided by board certified physicians, certified primary care nurse practitioners, licensed nurses, and other qualified personnel. Additional services offered at Student Health Services include a medical laboratory, an x-ray department, eye care, dental services, and physical therapy. The pharmacy dispenses prescriptions and sells over-the-counter items at cost. Low-cost consultations are available for osteopathic manipulative treatment, travel medicine, and orthopedics. Students are responsible for the cost of their healthcare whether received at Student Health Services or at an outside facility. Students are encouraged to purchase medical insurance coverage.

## REQUIRED: Proof of Immunity Against Measles and Rubella

All new or readmitted students born on or after January 1, 1957 must provide proof of immunity against measles and rubella (German measles) during their first semester at SDSU. The minimum requirement is proof of at least one immunization for measles and rubella given after the first birthday and after 1968. (All students are strongly encouraged to consider a second measles immunization.) Students whose enrollment services records indicate graduation from a California public high school may be exempt from this requirement.

Students may fulfill the immunization requirement by providing medical documentation as proof of immunization to Student Health Services. Positive laboratory evidence of measles and rubella immunity is also a way to prove immunization status. Students may also receive reduced cost immunization at Student Health Services. For more information, call 619-594-4325.

Important: Students who have not complied with this CSU requirement prior to the registration deadline will not be able to register for classes their second semester until they provide proof of immunity or receive MMR immunization.

## Hepatitis B

All new students who are 18 years of age or younger at the start of their first term must provide proof of immunity against hepatitis B during their first semester at SDSU. Hepatitis B vaccination consists of three timed doses of vaccine over a minimum four to six month period. (All students are encouraged to consider immunization against Hepatitis B.) Students whose enrollment services records indicate graduation from a California public high school may be exempt from this requirement.

Students may fulfill the immunization requirement by bringing or sending medical documentation of immunization or positive laboratory evidence of Hepatitis B immunity to Student Health Services. Students may also receive low cost immunization at Student Health Services. For more information, call 619-594-5281.

Important: Students who do not comply with this California Health and Safety Code during their first semester at SDSU will not be allowed to register for classes a second semester until they provide proof of immunity or begin the immunization series. Students who have not completed the immunization series by the end of their third semester will no longer be able to attend SDSU.

In addition to demonstrating immunity to measles and rubella at Student Health Services, 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.

Immunization documentation can be mailed to SDSU Student Health Services, Immunization Program, 5500 Campanile Drive, San Diego, CA 92182-4701, faxed to 619-594-6465 (include name, address, telephone number, date of birth, and SDSU RedID number) or uploaded to our secure web portal at https://healtheconnect.sdsu.edul.

## Meningococcal Disease

Each incoming freshman who will be residing in on-campus housing will be required to return a form indicating that they have received information about meningococcal disease and the availability of the vaccine to prevent one from contracting the disease and whether or not he or she has chosen to receive the vaccination.

Although immunization against this infection is not a requirement, all entering freshmen, particularly those living in residence halls, are urged to consider vaccination. The current vaccine is fairly effective against the majority of the strains of this bacterium, but unfortunately its immunity effect declines over a few years. A second "booster" dose is recommended at between the ages of 16 to 18 for those students who received their first vaccination at age 15 or younger. Luckily, the risk of becoming infected with meningococcus also declines with age. Consequently, there is less of a reason to immunize older students, although they may do so if they desire. The meningococcal vaccine is available at Student Health Services at a reduced cost.

## Strongly Recommended Health Screening

Immunization from the following diseases may also protect students against potentially severe infections: influenza (flu), tetanus, diphtheria, pertussis (whooping cough), polio, mumps, chicken pox (varicella), human papilloma virus (HPV), and Hepatitis A. Like measles, these too can be particularly harmful in college-aged persons. These immunizations are available at reduced cost at Student Health Services.

Entering students from developing countries are also strongly encouraged to have a screening test for tuberculosis (TB). The TB skin test is offered free at Student Health Services and a blood test is offered at reduced cost.

## Appointments

Students are encouraged to call Student Health Services to make appointments. Student Health Services is open 12 months of the year. Services are available between 8:30 a.m. to 4:30 p.m., Monday through Friday. All medical care provided at Student Health Services is strictly confidential. No one, on or off campus, other than Student Health Services staff, has access to medical record information without written permission from the student.

## Medical Excuse Policy

SDSU Student Health Services will 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, we will work with students to provide appropriate documentation. When a student is hospitalized or has a serious, ongoing illness or injury, SDSU Student Health Services will, at the student's request and with the student's consent, communicate with the student's academic adviser and/or Student Disability Services.

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. Academic advisers are available to provide assistance to students or faculty members who have concerns about attendance issues.

## Student Health Advisory Board

Students can offer important feedback about the scope of services, funding, and other critical issues relating to campus health services through membership on the Student Health Advisory Board (SHAB). Members provide oversight to campus health services and act as liaisons between the SDSU student body and Student Health Services. SHAB helps to keep Student Health Services staff focused and current on major student health issues. Membership from all academic majors is encouraged.

## Accidents and Student Insurance Coverage

First aid is also provided to faculty, staff, and campus guests for accidents and injuries occurring on campus with the understanding that individuals requiring any care beyond first aid will be transferred to the most appropriate medical facility. First aid is defined as one-time treatment that typically does not require a physician, laboratory, x-ray, or pharmacy services. 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.

Students are responsible for their own safety and health in connection with participation in campus activities and should exercise good judgment and due care at all times.

Specific questions regarding insurance coverage for 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.

Students participating in required or elective academic programs such as internships or practica through either nursing/allied health training, or in a teacher training program are covered under the university's Workers' Compensation program provided an internship agreement between the university and the facility has been executed by an authorized representative of the university. The university provides Student Professional Liability insurance to its students who are enrolled in these programs. This coverage is provided through Lloyd's of London. Students needing proof of this coverage for their participation in an institution's affiliation program can obtain a copy of the certificate of liability from their professor.

The university does not provide, accident or health insurance coverage to students. Students may obtain medical insurance through http://www.CoveredCA.com or through http://www.csuhealthlink.com.

The university makes no warranties as to the nature or quality of the coverage or the financial integrity of the insurers. The information on the availability of coverage is provided as a convenience to students.

## Advance Health Care Directives

As a patient, you have the right to give instructions about your own health care. An advance health care directive enables you to name another individual such as a relative or other person as a healthcare representative or "agent" or to make health care decisions for you if you become incapable of making your own decisions or if you want someone else to make those decisions for you now even though you are still capable. The advance health care directive lets you designate a physician to be primarily responsible for your medical care and lets your physician, family, and friends know your health care preferences, including the types of special treatment you want or do not want, your desire for diagnostic testing, surgical procedures, cardiopulmonary resuscitation and/or organ donation. It does not affect routine care for cleanliness and comfort, which must be given whether or not there is an advance directive. For further information, you may review the information provided at Advance Health Care Directive - California Department of Justice. We also recommend that you talk with your physician and your lawyer.

## Student Life \& Leadership

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

- Center for Leadership and Community Service Engagement - 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://www.sll.sdsu.edu/leadership/index.html.
- 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 Student Resource Center, located on the second floor of the Conrad Prebys Aztec Student Union, and through Casa Azteca, and Aztec Freshman Connection, commuter-based learning communities. http://www.sll.sdsu.edu/commuter/index.html.
- Fraternity and Sorority Life - is currently comprised of 44 social fraternities and sororities, including both general and culturally based organizations, represented by four governing councils. For more information, refer to Fraternity and Sorority Life in this section of the catalog or http://go.sdsu.edu/student affairs/sll/greeklife.aspx.
- The Pride Center at SDSU - creates, sustains, and strengthens an open, inclusive, safe, and affirming gathering space for persons of all sexual and gender identities and their allies. It also facilitates campuswide education, awareness, dialogue and research on issues related to sexuality and gender. The center addresses the needs of students who may experience discrimination, disenfranchisement, harassment, or other barriers to student success as a result of their sexual orientation or gender identity and expression. For more information, visit http://pridecenter.sdsu.edu.
- Student Organizations and Activities - facilitates on-campus status 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://studentaffairs.sdsu.edu/SLL/ studentorgs/index.html.


## Student Rights and Responsibilities

## Student Services West, Room 1604 <br> 619-594-3069

http://studentaffairs.sdsu.edu/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.

Campus related violations include both academic and non-academic misconduct, misconduct in the off-campus surrounding community, off-campus community-sponsored events, and online sites.

To review information regarding the Standards for Student Conduct, the discipline process, privacy rights, and complaints procedures, visit http://www.sa.sdsu.edu/srr.

## Testing Services

## Student Services West, Room 2549

619-594-5216

## FAX 619-594-5036

## http://testing.sdsu.edu

Testing Services supports and enhances student success by providing innovative and high quality test administration for SDSU and off-campus constituents. Testing Services is an important resource for the entire university community, serving both students and faculty by administering and analyzing paper and pencil and computer-based tests for the purposes of admission, class placement, competency for graduation, licenses, and credentials. Additionally, Testing Services provides test proctoring for the greater San Diego community, including distance learning students.

Information about San Diego State University competency and placement tests and test dates are listed on the Testing Services website. Advance reservations as well as fee payments are required for most tests. Testing Services provides test administration for the CBEST, CSET, GRE, LSAT, MCAT, TEAS, TOEFL, among other national examinations. Most reservations for national examinations are made through their respective websites. For SDSU students, special arrangements for disabled students are made through Student Disability Services.

## Special Programs and Services

## Academic Computing

SDSU provides access to a large number of software packages including programming languages, the Microsoft Office Suite (word processing, spreadsheets, presentations), relational databases, statistical software, and large research-oriented databases. 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 Computer Center located in Love Library, Room 200 (PCs, Macintoshes, 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 same login credentials as the SDSU WebPortal. 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 The Montys (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 <br> San Diego State University

Associated Students (A.S.) is an independent student-directed corporation that is one of the largest student governance organizations in the CSU system. As an affiliate of San Diego State University, the programs and facilities A.S. manages are enjoyed by 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 a multitude of leadership opportunities through the Associated Students. Government Affairs is the representative voice for all SDSU students. Student government leaders work hard every day to ensure that the interests of SDSU students are heard, served, and met. The A.S. student leaders also have a dual role as the board of directors for the A.S., a non-profit studentdirected corporation. A.S. operates eight fully functional facilities on and off campus in addition to a multitude of programs and services that benefit students and the campus community. Students who want to get involved are encouraged to visit the A.S. office in person or online to
earn about available opportunities. For more information call 619-5946555 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. Designed to be plati-num-certified for Leadership in Energy and Environmental Design (LEED) by the U.S. Green Building Council, the new Conrad Prebys Aztec Student Union features numerous sustainable "green" building elements and includes new dining options, bowling and games center, fitness center, increased meeting spaces, a multipurpose theatre and plenty of indoor/outdoor seating areas. To learn more about all that the Conrad Prebys Aztec Student Union has to offer, visit http://aztecstudentunion.com. To inquire about meeting space, call Union Programs and Services at 619-594-5278 or e-mail asmtgsvs@ mail.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 s 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. The Children's Center is located in the lower E-Lot, north of Parking Structure 6. For more information call 619-594-7941, e-mail ccc_info@mail.sdsu.edu, or visit http://www.childcare.sdsu.edu.

Cal Coast Credit Union Open Air Theatre and Entertainment. 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. The venue features full-service concession stands and a two-level hospitality suite, equipped with open balconies and dressing rooms. For event information, call 619-594-0234 or visit http://calcoastopenairtheatre.com.

Viejas Arena. Home to Aztec 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, VIP lounges, and star dressing rooms, as well as 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 provides high quality programs, services, and facilities that inspire active, healthy living, and enhance the SDSU experience. A program of Associated Students, Aztec Recreation manages six on-campus facilities: Aztec Recreation Center (ARC), ARC Express, Aztec Aquaplex, Aztec Lanes, tennis, racquetball, and the Mission Bay Aquatic Center (MBAC), an off campus water sports facility. An Aztec Recreation membership enables access to many of the programs including group fitness, intramural sports, sport clubs, bowling, indoor climbing and includes access to the ARC, ARC Express, Aztec Aquaplex, tennis, and racquetball courts. Call 619-594-PLAY or visit http://arc.sdsu.edu for more information.

Aztec Adventures. Aztec Adventures has provided SDSU with leadership, education, and culture since 1977. The Aztec Adventures' philosophy is that traveling in the outdoors by simple means is a healthy alternative to our normally technolo-gy-dependent lifestyles. In addition to outdoor trips, the Aztec Adventures team offers numerous Department of Exercise and Nutritional Sciences credit classes, operates the climbing wall located inside the ARC, and offers a team-building program ideal for student clubs and organizations. For more information call 619-594-6958 or visit http://aztecadventures.sdsu.edu.
Aztec Aquaplex. The Aztec Aquaplex is an outdoor swimming and recreation facility with members having access to the Aquaplex for drop-in lounging, water sports, and fitness. The facility is also used by men's and women's water polo sport club teams as well as the SDSU Aztec Athletics women's swimming, diving, and water polo teams. Call 619-594-SWIM or visit http://www.arc.sdsu.edu for more information.
ARC Express. The ARC Express is an exciting new fitness destination for members of Aztec Recreation. Located on the third floor of the Conrad Prebys Aztec Student Union, the facility offers 6,000 square feet of state-of-the-art fitness equipment with spectacular views of the surrounding area. Call 619-594-PLAY or visit http:// arc.sdsu.edu for more information.
Aztec Lanes. Aztec Lanes is the new bowling and games center located on the first floor of the Conrad Prebys Aztec Student Union. Featuring 12 bowling lanes, with scoring and seating areas outfitted by Brunswick, the facility also offers participants a games lounge with five billiards tables, table tennis tables, and eight big-screen televisions. While bowling is open to all at Aztec Lanes, members bowl at no charge and only pay for shoe rental. Call 619-594-2695 or visit http://arc.sdsu.edu for more information.
Aztec Recreation Center (ARC). The Aztec Recreation Center (ARC) is an 80,000 square foot fitness and recreation facility. Access to the ARC is included with an Aztec Recreation membership. The ARC has four multi-purpose gymnasiums available for members to play basketball, soccer, and volleyball, two weight training rooms, a cardio room, a climbing wall, and two group fitness studios. Call 619-594-PLAY or visit http://www.arc.sdsu.edu for more information.
Aztec Tennis Courts. The Aztec Tennis Courts feature 12 lighted outdoor courts available for drop-in play for members. The courts are accessible through the Aztec Aquaplex at 5375 Remington Road, adjacent to Tony Gwynn Stadium. Call 619-594SWIM or visit http://arc.sdsu.edu for more information.
Credit Classes. Aztec Recreation is proud to partner with the 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, outdoor skills, and water sports. Call 619-594PLAY or visit http://arc.sdsu.edu for more information.
Mission Bay Aquatic Center (MBAC). The world-renowned Mission Bay Aquatic Center is Aztec Recreation's beachside instructional facility offering water sports classes, rentals, and special events. Every semester, hundreds of students earn university credit while learning to kayak, row, sail, stand up paddle, surf, wakeboard, or windsurf. Located off-campus in Mission Beach, MBAC is just a short ride by car or is easily accessible by the San Diego Trolley and the San Diego Metropolitan Transit System (MTS). For more information, call 858-488-1000 or visit http://mbaquaticcenter.com.
Intramural Sports. Aztec Recreation members have the opportunity to participate in intramural tournaments and leagues on a competitive or recreational level. A variety of indoor and outdoor sports are offered throughout the year and participants form teams with friends or sign-up independently in sports including basketball, bowling, dodgeball, flag football soccer, tennis, volleyball, and water volleyball. Call 619-594PLAY or visit http://arc.sdsu.edu for more information.
Recreational Sports Racquetball Courts. Racquetball courts are accessible to Aztec Recreation members. The facility includes eight indoor courts and equipment check-out is available. Sport club offices are also housed in this facility located at Peterson Gymnasium, Room 196. Call 619-594-PLAY or visit http://arc.sdsu.edu for more information.

Sport Clubs. The SDSU sport clubs program consists of 19 competitive collegiate teams. Each team is developed, organized, and managed by students with guidance from the professional staff. Sport clubs compete in intercollegiate competitions at local, state, regional, and national levels and both new and experienced student-athletes are actively recruited. Sport clubs are an excellent setting for the development of athletic skills, student leadership skills, and social opportunities. Call 619-594-PLAY or visit http://arc.sdsu.edu for more information.

## 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, crew, cross country, golf, lacrosse, 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 crew, lacrosse, men's soccer, and water polo compete in the 9 -member Mountain West Conference. Crew is a member of the Western Intercollegiate Rowing Association (WIRA); men's soccer is a member of the Pac10 Conference; lacrosse, and water polo are members of the Mountain Pacific Sports Federation (MPSF).

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 teams frequently carry the aspirations of San Diego in the forum 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 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 include hearing assessment, hearing aid evaluation and selection, assistive listening device evaluations, earmolds, ear protectors, hearing conservation 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 San Diego State and at other colleges and universities. The corporation employs close to 200 full-time professionals and up to 800 part-time employees mainly students - during the busiest times

SDSU Bookstore. The flagship of Aztec Shops' retail operations, the SDSU Bookstore is one of the largest campus bookstores in the country as measured by sales. The 25,000-square-foot facility - located in the heart of campus - carries every text (required and optional) for every class taught at SDSU. Textbooks are available in print for rent or purchase and many titles are available in digital format. The bookstore's Aztecnology department offers academic discounts on Apple and PC products as well as software from Microsoft, Adobe, and others. Additional Aztecnology services include Verizon Wireless, device repair, hardware trade-in, and printer cartridge refill. The SDSU Bookstore features the most extensive selection of SDSU-licensed clothing and gifts available. The facility's "Bookstore within a Bookstore" offers an impressive selection of general-interest titles including volumes for children. The store's well-staffed special order desk is available to secure even the most hard-to-find titles. A specialty boutique and a broad selection of school supplies, cards, gifts, and graduation regalia round out the store's offerings. For more information, call 619-594-7525 or visit http://www.shopaztecs.com.

SDSU Dining. SDSU Dining has been providing quality food service for the SDSU campus since 1959. Dining proudly operates over 30 restaurants and food service outlets on campus including Culinary Theater, The Dining Room at Cuicacalli Suites, the Farmers' Market, University Towers Kitchen (UTK), and six Aztec Market convenience stores campuswide. For more information on SDSU Dining call 619-5947640 or visit http://www.eatatsdsu.com.

Other operations. Other Aztec Shops operations include:
The Campus Store - Aztec Shops operates The Campus Store, the bookstore at the SDSU branch campus in Calexico, CA.
Concessions - Aztec Shops operates the concession stands at the Cal Coast Credit Union Open Air Theatre, Tony Gwynn Stadium, and Viejas Arena.
Montezuma Publishing - As part of its commitment to providing course materials for every class, Aztec Shops operates Montezuma Publishing which prints customized course materials and readers, securing copyright permissions when necessary
Road Scholar - Aztec Shops runs a successful Road Scholar program that brings retirement-age adults from around the country to San Diego for specialized educational enrichment programs.
SDSU Catering - SDSU Catering is the recognized caterer for all events on the SDSU campus.
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 systemwide program, the California State University Program for Education and Research in Biotechnology (CSUPERB) supports collaborative CSU student and faculty research, funds innovative curriculum development, and develops programs relevant to the life science industry. The CSUPERB program office is hosted at San Diego State University. CSUPERB promotes biotechnology workforce development by supporting evidencebased instructional practices, real-world research experiences, and programs for faculty and students at all 23 CSU campuses. The program involves students and faculty from life sciences, physical
sciences, clinical sciences, engineering, agriculture, mathematics, business and computer science departments. CSUPERB organizes the annual CSU Biotechnology Symposium and serves as the official biotechnology liaison for the CSU with government, educational, philanthropic, and industry partners.

CSUPERB recognizes that modern biotechnology preparation requires the integration of coursework, hands-on practice and participation in multi-disciplinary, team-based research projects. CSUPERB's competitive grants and awards programs support these activities systemwide. Programs include: the NSF-funded CSU I-Corps program, the Howell-CSUPERB Research Scholars Awards, the Presidents" Commission Scholar Awards, the Crellin Pauling Student Teaching Award, the Glenn Nagel Undergraduate Research Award, the Don Eden Graduate Student Research Award, Travel Grant programs for students and faculty, New Investigator Grants, Research Development Grants, Entrepreneurial Joint Venture Grants, and Biotechnology Programmatic Development Grants. These programs award more than $\$ 800,000$ to CSU faculty and students annually.

CSUPERB programs are administered by an Executive Director, a strategic planning council and a faculty consensus group, involving faculty representatives from each CSU campus. The Presidents' Commission includes presidents from San Diego State University, CSU Channel Islands, CSU Northridge, CSU San Marcos, Humboldt State University, San Francisco State University, San Jose State University, and a CSU Executive Vice Chancellor. Visit the program websites at http://www.calstate.edu/csuperb and http://www.csuperb. org/csuicorps for more information.

## Developmental Writing Program

The Developmental Writing program, in the Department of Rhetoric and Writing Studies, assists students in completing the university's writing competency requirement. The program's services are available on an enrollment basis only. The university requires students to demonstrate writing competency consistent with its established standards and, accordingly, requires all entering students to pass various writing competency tests. Students who do not score high enough on any of these tests must enroll in appropriate developmental writing coursework in the Department of Rhetoric and Writing Studies during their first semester at SDSU. As of fall 2001, incoming freshmen have only three consecutive academic semesters in which to complete developmental writing requirements.

## General Mathematics Studies

The General Mathematics Studies mathematics laboratory offers tutorial assistance to students enrolled in GMS courses. This service is designed to assist students in completing the CSU ELM requirement. The university requires all students to demonstrate mathematics proficiency consistent with its established standards. In particular, students who fail the ELM must enroll in the appropriate General Mathematics Studies course in their first semester and continue until they have satisfied this requirement. Incoming freshmen have only three consecutive academic semesters in which to complete developmental math requirements.

## Honors Council

The Honors Council was formed in 1989. It comprises representatives of the Weber Honors College and of Phi Eta Sigma, 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 fall, the chapter invites to membership juniors and seniors in the upper 15 percent of their classes who have completed their last 24 units at SDSU. Elected student officers set all agendas and direct activities. The faculty adviser is Dr. Edith J. Benkov, Professor of French. For more information, visit http://dus.sdsu.edu/dus/ honorscouncil/golden_key_page.aspx.

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 support of philanthropy projects related to literacy, awarding of scholarships, an annual faculty/staff appreciation dinner, support of activities and projects of the San Diego Alumni Chapter, and the sale of the Mortar Board Daily Planner and Calendar of Events.

To be considered for election to membership, students must have senior standing for the fall semester with an overall GPA of 3.2 or higher 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 40 students per year.

Advisers for the honor society are Dr. Jane K. Smith, Emeritus Assistant Vice President for Academic Services, Dr. Seth W. Mallios, Professor of Anthropology, Dr. Emilio Ulloa, Resident Adviser in Psychology, Megan Isaacson, former Mortar Board president, and Cassandra Conboy, Child and Family Development Project Manager. Information is available at http://www.sdsumortarboard.com.

Phi Beta Kappa, founded in 1776, is the oldest academic honor society in America. Its 283 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 and student members. 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, a course in advanced mathematics or equivalent, and three college semesters of a foreign language. 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 Professor Annalisa Berta. Corresponding secretary is Professor Emerita Carey G. Wall, wall@mail.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 300 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.

The adviser for the honor society is Christine Molina. For more information, call 619-594-0474.

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, the Henry L Janssen Last Lecture Series, 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.

President of the society is Dr. Stephen A. Schellenberg, Associate Dean, Division of Undergraduate Studies and Professor of Geological Sciences.

Scholars Without Borders founded in 2008, is a multidisciplinary honor society dedicated to promoting international exchange and service and to recognize the scholarly achievement of SDSU students, faculty, and staff. As a fellowship of international scholars, we support programs with an international focus and build campus awareness of international issues and opportunities. We strive to inspire SDSU students, faculty, and staff to become engaged and committed scholar-citizens of the global community.

Students who are interested in an international perspective and have demonstrated high scholastic achievement (graduates with a minimum 3.5 GPA based on a minimum six units earned, and undergraduates with a minimum 3.25 GPA based on a minimum total of 30 units earned) are invited to join Scholars Without Borders.

Scholars Without Borders awards about \$10,000 in study abroad scholarships to eligible members each year. Chapter activities and programs include internationally-related workshops and lectures, regional symposia, an annual installation reception, and the International Photo Contest.

The adviser for Scholars Without Borders is Seth Kaplowitz, College of Business Administration, skaplowitz@mail.sdsu.edu, 619-594-0973, http://dus.sdsu.edu/dus/honorscouncil/scholars_without_borders.aspx.

## 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 Epsilon Delta (Pre-Medical)
Alpha Kappa Delta (Sociology)
Beta Alpha Psi (Accountancy)
Beta Gamma Sigma (Business)
Chi Epsilon (Civil 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 Delta Phi (French)
Pi Kappa Lambda (Music)
Pi Sigma Alpha (Political Science)
Psi Chi (Psychology)
Sigma Delta Pi (Spanish)
Sigma Gamma Tau (Aerospace Engineering)
Sigma Tau Delta (English)
Sigma Theta Tau (Nursing)
Tau Beta Pi (Engineering)

## Instructional Technology Services

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, located on the first floor of the Adams Humanities building, offers a variety of faculty-focused support services, including:

- Consultation, workshops, and collaboration via the SDSU Course Design Institute on the design and facilitation of effective learning experiences and environments, whether face-to-face or online;
- A Faculty Instructional Technology (FIT) Center located in Adams Humanities, Room 1109 that provides an informal environment for faculty consultations, collaboration, and development of instructional, professional, and research materials;
- Training and support for instructional software including:
- Blackboard (web-based learning management system that allows faculty to facilitate learning online);
- Lecture capture tools enabling faculty to record lectures from their classroom or office for students to view at their convenience;
- Respondus (assessment building software enhancing the question pool and quiz/test functions of Blackboard), and a custom browser that locks down the testing environment within Blackboard;
- Response system (or clickers) enabling greater interactivity in classrooms;
- Turnitin (writing support and plagiarism prevention software available through Blackboard);
- Collaborate (web-based conference system that enables voice interactivity and webinar capabilities through Blackboard or independently);
- Graphic, video, and multimedia consultation, design, and production;
- Assistance with design and development of instructional materials to be accessible and useful to diverse learners;
- Video conference systems for distance learning, allowing faculty to teach at SDSU and the Imperial Valley Campus (or other distant sites) simultaneously. This live, real-time, two-way audio/ video communication system can also be used for research and professional development purposes;
- ITS-managed learning spaces, including two Learning Research Studios (for faculty interested in teaching in a technology-rich space and taking an inquiry-oriented approach to teaching and learning with technology.) ;
- Instructional equipment loans (including laptop computers and video/data projectors, portable public address systems, digital cameras, camcorders, digital audio recorders, and much more);
For more information, call 619-594-5910 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.

## Smart Classrooms

For instruction using multimedia and computer technologies, smart classrooms provide user-friendly, technology-rich presentation systems. Each classroom system contains the following within a fixed instructor podium:

- Mac and Windows computers;
- Connectivity for a laptop computer;
- DVD or Blu-ray disc player;
- Visual presenter/document camera for projection of print, transparency, and three-dimensional materials.
Projection is achieved via LCD video/data projector and in larger lecture halls, a public address system with wireless microphone unit and assistive listening device are included.

As of fall 2014, $98 \%$ 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 College of Business Administration 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 619-2942174 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 CourseReserve 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 is 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 $(11,14,15,115,856,936,955)$ conveniently connect the San Diego metropolitan area with service to the San Diego State University Trolley Station and Transit Center. Monthly trolley and bus passes can be purchased at the Viejas Arena Ticket Office.

Further information concerning Metropolitan Transit trolley and bus routes, fares, services, and carpool registration is available at 1-800COMMUTE or http://www.sdmts.com and http://www.ridelink.org.

On-campus parking is by permit only and overnight parking requires an additional permit. Purchase or possession of a parking permit does not guarantee a parking space and parking is limited and available on a first come, first serve basis. Parking structures and surface lots are located on the perimeter of the campus, with the remote parking lots serviced by free shuttle vans weekday evenings (Monday through Thursday) during the academic year. 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. For further information on parking at the San Diego campus, contact Parking Services, 619-594-6671. For visitor parking at the Imperial Valley Campus, call 760-768-5500.

## San Diego State University Research Foundation

San Diego State University Research Foundation, incorporated in 1943, 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, as a nonprofit corporation, is governed by a board of directors in accordance with its articles of incorporation and bylaws. The principal function of the board is to establish policies and guide the corporation in achieving its objectives.

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 the scholarly press for San Diego State University, San Diego State University Press publishes works of original research, as well as other meritorious academic and creative works that will 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 editorial board made up of six scholars within SDSU's College of Arts and Letters and eight scholars from other universities. San Diego State University Press's various publication programs and imprints include: Baja California Literature in Translation, Binational Press/ Editorial binacional, Code[x] Books, Hyperbole Books, The Institute for Regional Studies of the Californias, SurText, and research lectures. The current focus of the press is in these areas: Latin America and the United States-Mexico border; regional studies of the Pacific Southwest; and post-modernism. In addition to books, the press also publishes under its imprint the journals pacificREVIEW: A West Coast Arts Review Annual and Poetry International.

San Diego State University Press is controlled by an editorial committee of scholars, appointed by the SDSU senate. Financial accounting and coordination are provided by the San Diego State University Research Foundation.

## Semester and Summer Study Abroad Programs

## Barcelona Summer Program

The Barcelona Summer Program offers students the opportunity to study in Barcelona while earning SDSU resident credit through the College of Extended Studies. Courses satisfying upper division General Education Explorations of Human Experience are taught by SDSU faculty. To be eligible, students must be sophomores, juniors, or seniors in good academic standing. For further information, contact the Office of International Programs, College of Arts and Letters, calstudyabroad@mail.sdsu.edu, 619-594-3476.

## Florence Summer Program

The Florence Summer Program offers students the opportunity to study for a six week summer term in Florence while earning SDSU resident credit. Courses satisfying upper division General Education Explorations of Human Experience are taught by SDSU faculty. To be eligible, students must be sophomores, juniors, or seniors in good academic standing. For further information, contact the Office of International Programs, College of Arts and Letters, calstudyabroad@ mail.sdsu.edu, 619-594-3476.

## London Summer Program

The London Summer Program offers students the opportunity to study in London while earning SDSU resident credit through the College of Extended Studies. Courses satisfying upper division General Education Explorations of Human Experience are taught by SDSU faculty. To be eligible, students must be sophomores, juniors, or seniors in good academic standing. For further information, contact the Office of International Programs, College of Arts and Letters, calstudyabroad@mail.sdsu.edu, 619-594-3476.

## Madrid Semester Academic Program

The Madrid Semester academic program is administered by the Department of Spanish and Portuguese. This program offers students the opportunity to study the Spanish language and culture in Spain for four months and to live in Madrid. Open to SDSU and other California State University students in good standing who have completed at least three college semesters of Spanish (or equivalent). All courses are taught by faculty of the Center for Spanish Studies at Antonio de Nebrija University. Living accommodations are with Spanish-speaking families throughout Madrid. Students earn 12-15 SDSU resident units toward the bachelor's degree through the College of Extended Studies. SDSU financial aid may be available to qualified students. For further information, contact the Office of International Programs, College of Arts and Letters, calstudyabroad@mail.sdsu.edu, 619-594-3476.

## Paris Semester Academic Program

The Paris Semester academic program is administered by the Department of European Studies. It offers students the opportunity to study for a semester in Paris, while earning 12-15 units of SDSU resident credit. Courses satisfying General Education, French, and International Business requirements are taught by SDSU and Parisbased faculty. To be eligible, students must be sophomores, juniors, or seniors in good academic standing with a minimum of two college semesters of French. For further information, contact the Department of European Studies, Storm Hall, Room 224A.

## Joan and Art Barron Veterans Center

The Joan and Art Barron Veterans Center, the first veterans resource center in the California State University system, operates as the primary and initial resource for most military affiliated services at San Diego State University. Keeping to our motto of "serving those who served," the primary mission of the staff is to assist veteran, active duty, reserve, guard, and military dependent students with the following applicable federal and/or state educational benefits:

- Chapter 30 (Montgomery GI Bill - Active Duty);
- Chapter 31 (Vocational Rehabilitation and Employment);
- Chapter 33 (Post-9/11 GI Bill);
- Chapter 35 (Dependents Educational Assistance);
- Chapter 1606 (Montgomery Gl Bill - Selected Reserve);
- Chapter 1607 (Reserve Educational Assistance Program);
- California Department of Veterans Affairs College Fee Waiver for Veterans' Dependents (Cal-Vet Fee Waiver).
In order to receive GI Bill benefits while attending SDSU, the student must be regularly matriculated (or be a guest student from another institution), ensure all certified classes are required for the educational objective selected, and request to be certified every semester.

Students utilizing Chapter 33 must provide the Joan and Art Barron Veterans Center with a copy of their Certificate of Eligibility in order to have their tuition deferred pending payment from the Department of Veterans Affairs (VA). Subject to pending or new legislation, out-of-state students may have an additional fee per unit which is not covered by the GI Bill.

Students using the Cal-Vet Fee Waiver must provide a copy of the approval letter to the Joan and Art Barron Veterans Center every academic year (the letter will cover the fall, spring, and summer terms). This letter waives the basic tuition and state fees, but the student is still responsible for the campus mandatory fees.

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

- Access to SDSU VetSuccess on-campus counselor who provides full-time assistance in all VA related aspects;
- Participation in VA work-study program allowing eligible students to work part-time while attending school;
- Assistance with VA tutorial assistance program;
- Management of first on-campus Student Veterans House in the country affording military affiliated students a place to study, relax, and interact with other students from a military background;
- Priority access to designated veterans living spaces on campus;
- Partnership with SDSU Student Veterans Organization which represents the cultural niche of the military student body.
For information on GI Bill eligibility, application, and usage, visit www.gibill.va.gov or call 888-442-4551.

For information about remaining entitlement, payments, and other VA-related programs, visit http://www.ebenefits.va.gov.

For information on the CalVet Fee Waiver, visit www.cdva.ca.gov.
For additional information about veteran services, contact the Joan and Art Barron Veterans Center at 619-594-5813 or visit http://www.sdsu.edu/veterans.

## PART THREE

Division of Underg raduate Studies Division of Gradua te Affairs Division of Research Affairs

Colleges
Library and Information Access Imperial Valley Campus

# Division of Undergraduate Studies 

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

## Administration

Dean: Geoffrey W. Chase
Associate Dean: Stephen A. Schellenberg
Assistant Dean: Michelle Lopez

## General Information

The mission of the Division of Undergraduate Studies 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 univer-sity-wide programs and services. The division houses the following:

- Academic Engagement Programs
- Center for Regional Sustainability
- Center for Teaching and Learning
- Compact Scholars Program
- Early Assessment Program
- Interdisciplinary Studies in Three Departments
- Liberal Studies
- National Scholarships and Fellowships
- The Sage Project
- Thomas B. Day Student Success Programs
- Undeclared Advising
- Weber Honors College

The division is also responsible for several universitywide mandates. It provides coordination and evaluation of the undergraduate programs at San Diego State University and has general responsibility for the undergraduate curriculum and for academic standards and regulations that affect undergraduate education. Additionally, it coordinates the Western Association of Schools and Colleges (WASC) reaccreditation process, the assessment of student preparedness in writing and mathematics at the freshman and transfer levels, the assessment of student learning, and of the Graduation Writing Assessment Requirement.

## Research Center

## Center for Regional Sustainability Geoffrey W. Chase, 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 SDSU/CRS is also home to the Sage Project. More information is available at http:// crs.sdsu.edu.

## Programs and Services

## Academic Engagement Programs José Preciado, Director

The office implements the Common Experience, the Faculty-Student Mentoring Program, the Service Learning and Community Engagement Program, the Undergraduate Research Program, and the Undergraduate Studies Internship Program. These programs support high impact educational practices that increase faculty-student interactions, deepen student learning, and lead to advanced student achievement.

Common Experience (CE). The Common Experience (CE) serves to facilitate increased interactions among faculty, staff, and students through a focus on common contemporary themes, related readings, and academic endeavors. On an annual basis, the Common Experience advisory committee selects a timely and relevant theme and invites participation from across the campus to prepare a series of lectures, seminars, and complementary academic activities by faculty, authors, community, and civic leaders for the following academic year. CE lectures and activities extend student learning and faculty-staff-student experiences beyond the classroom. Students will engage in deconstructing and exploring a common subject, treated and examined through multidisciplinary lenses, learn to value intellectual and personal responsibility, and apply academic thought towards finding meaningful solutions to real-world problems. For information about CE themes and activities, call 619-594-2209 or visit http://commonexperience.sdsu.edu/dus/commonexperience

Faculty-Student Mentoring Program (F-SMP). Faculty-Student Mentoring Program (F-SMP) 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/dus/fsmp or call 619-594-2209.

Service Learning and Community Engagement Program (SLCEP). 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://dus.sdsu.edu/dus/service/ or call 619-594-2209.

Undergraduate Research Program (URP). The Undergraduate Research Program (URP) provides faculty with mini-grants to support student participation in undergraduate research, scholarship, or creative activities (URSCA). Faculty serve as mentors, seminar leaders, and/or General Studies 490 instructors. Mini-grant funded projects support students to meet URSCA learning outcomes and present their work to peers and faculty in campus, regional, or international forums. Faculty and student participants are encouraged to collaborate for at least two semesters. Additional resources are available for student travel to conferences. The URP seminar in undergraduate research, General Studies 490, may be taken by students multiple times to earn up to a maximum of six units of credit. Enrollment is subject to approval by instructors. Students must consult with their undergraduate advisers to verify that General Studies 490 units can be used to meet graduation requirements for the major or the degree. For additional information, visit http://dus.sdsu.edu/dus/urp/ 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.

## 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 Undergraduate Studies, mlopez@ mail.sdsu.edu or call 619-594-5842.

## Center for Teaching and Learning (CTL) Jennifer Imazeki, Director

The Center for Teaching and Learning (CTL) promotes effective teaching and learning at SDSU through collaborative ventures with individual faculty, academic units, support services, and student leaders. The center assists SDSU's varied learning communities to:

- define learning goals;
- explore, understand, and improve learning processes;
- create learning activities and environments that improve student success;
- design, organize high-impact and informal learning opportunities;
- apply sound principles of teaching, learning, and technology to the design of courses and academic programs; and
- assess the effectiveness of educational services and systems and utilize assessment data to guide improvements.
The center serves as a campus clearinghouse for information about teaching and learning resources and holds orientations and other events for new faculty. It sponsors an extensive series of complementary lunches, discussions, and workshops, open to all faculty and student support professionals, on contemporary issues in teaching and learning ranging from the design of learning activities to cultural and
psychological factors in student learning and achievement. Working with Instructional Technology Services, Library and Information Services, the Division of Student Affairs, the College of Education, and other units, the center coordinates training to help faculty and administrators design and assess courses and academic programs.

CTL provides confidential and supportive services to individual faculty members at their request, assisting with reviews of teaching evaluation data and improvement of classroom presentations and activities.

For more information visit http://ctl.sdsu.edu or call 619-594-3157.

## Compact Scholars Program <br> Janet Abbott, Director

The Compact Scholars Program (CSP) is the postsecondary component of the Compact for Success Partnership between the Sweetwater Union High School District and San Diego State University. The program supports student success by connecting this community of largely local commuter students to the resources offered on campus. Compact Scholars are encouraged to actively engage in "high-impact" educational experiences, such as undergraduate research programs, study abroad, community based service learning activities, and leadership development.

The goal of the CSP is to promote higher graduation rates for Sweetwater District students by deepening student engagement. The first class of Compact Scholars matriculated to San Diego State University in 2006, As of May 2013, four classes of Compact Scholars have graduated. For more information about the Compact Scholars Program, visit http://csp.sdsu.edu/dus/compactscholars or call 619-594-3803.

For more information about the Compact for Success, visit http:// compactforsuccess.sdsu.edu/compact or call 619-594-0732.

## 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.

## Interdisciplinary Studies in Three Departments Paul W. Justice, Director

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. Because three disciplines are involved, the program must have a clear focus and depth that make academic sense; the areas of study and the choice of courses within these departments must complement each other. 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 http://dus.sdsu.edu/dus/ interdisciplinarystudies.aspx.

## Liberal Studies Program <br> Sharon F. Bendall, Director

The liberal studies major is designed for future teachers, primarily at the elementary level, but also at the middle school level. Additionally, liberal studies prepares students to enter credential programs in special education and bilingual education (multiple subjects). The coursework in the liberal studies major closely matches the State of California's standards for elementary education and serves as excellent preparation for the state-mandated CSET examination,
which is required for admission to a credential program in California. The major also provides multiple opportunities for students to gain experience in the field in a variety of settings.

For more information about the Liberal Studies Program visit http://libst.sdsu.edu/ or call 619-594-0597.

## The Sage Project

Jessica A. Barlow, 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. The Sage Project focuses courses across the university on assisting with projects that address the partner's sustainability goals and pressing community needs. Students have the opportunity to engage in meaningful real-world projects and contribute to the quality of life of a community in SDSU's service area through their coursebased effort. The Sage Project 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 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 or call 619-594-3807.

## Thomas B. Day Student Success Programs Janet Abbott, Director

Endowed by Bernard and Doris Lipinsky, the Thomas B. Day Student Success Programs seek to ensure the success of all students at the university, by helping to provide pathways to student support services and to enrich learning opportunities via high-impact educational practices. In order to serve the whole student, the Thomas B. Day Student Success Programs forms intentional partnerships between the Division of Undergraduate Studies, the Division of Student Affairs, and the Academic Colleges, that include the following:

Residential Learning Communities. A Residential Learning Community is an option in which first-year students live and take courses together. Small groups of students take courses that fulfill graduation requirements and bring together students with a common interest or a common area of study, such as social justice or business. Students in Residential Learning Communities take advantage of special academic support services and additional computer laboratories and study lounges. Visit http://www.sdsu.edu/housing to learn more about this enriched housing option.

University Seminar. One-unit elective courses (General Studies 100) provide students with an opportunity to explore a variety of areas that define the university experience at a major comprehensive university. In some instances, these courses are embedded within the Residential Learning Communities-including the Honors Residential College. In other cases, the courses are program-defined, for example, offered by EOP, Athletic Support Services, or the Compact Scholars Program.

Division of Undergraduate Studies Student Learning Lounge. Housed in Administration, Room 201, the Student Learning Lounge is one of the few indoor study spaces open to all students on campus outside of Love Library, that promotes deeper student engagement and academic activities to ensure student success.

The DUS Student Learning Lounge provides a learning commons for students to study, access academic resources, and to meet face-to-face with valuable student support professionals during the academic week. It is also a shared space between the students, faculty, and staff. In addition to serving as a comfortable study space, the lounge also provides access to several computers, a printer, kitchenette, and a conference room and outdoor patio that may be reserved by students and staff for group study or meetings. DUS students assist in monitoring the operation of the lounge that is frequented by their peers in various DUS programs including, but not limited to: the Compact Scholars Program, Weber Honors College, and Liberal Studies.

## Undeclared Advising Michelle Lopez, Assistant Dean

First-year students who are undecided about a major have the option of the undeclared pre-major. Undeclared pre-majors have the flexibility and challenge to complete a variety of course options while still earning their degree within four years. The Division of Undergraduate Studies collaborates closely with Career Services 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, and year-round group advising sessions. Students are encouraged to follow the Undeclared MyMap, meet with a career counselor at Career Services their freshmen year, and visit with faculty and staff advisers in their pre-major(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 http://undeclared.sdsu.edu/dus/ undeclared/Default.aspx or call 619-594-5842.

## Weber Honors College <br> 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 first year students accepted into the Weber Honors College are required to live in the Honors Residential College in Maya 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 campus activities, leadership opportunities, and academic engagement.

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 independent 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.

For a description of the program, 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.

# Division of Graduate Affairs 

# OFFICE: Student Services East 1410 <br> TELEPHONE: 619-594-5213 <br> FAX: 619-594-0189 <br> E-MAIL: gra@mail.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, the Doctor of Nursing Practice (DNP), 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<br>Education<br>Educational Leadership<br>Concentration in PreK-12 Leadership<br>Concentration in Community College/Postsecondary Leadership<br>\section*{Professional Doctorates}<br>Audiology<br>Doctor of Nursing Practice<br>Doctor of Physical Therapy<br>Educational Specialist<br>Ed.S. in School Psychology

| Anthropology G | Geography | Psychology |
| :---: | :---: | :---: |
| Art Hist | History | Rhetoric and Writing |
| Asian Studies In | Interdisciplinary Studies | Studies |
| Biology L | Latin American Studies | Sociology |
| Chemistry L | Liberal Arts and Sciences | Spanish |
| Chicana and Chicano L | Linguistics | Speech, Language, and |
| Studies M | Mathematics | Hearing Sciences |
| Communication M | Music | Teaching |
| Economics P | Philosophy | Television, Film and |
| Education P | Physics | New Media Production |
| English P | Political Science | Theatre Arts |
| French |  | Women's Studies |
|  | Master of Science |  |
| Accountancy | Computer Science | Interdisciplinary Studies |
| Aerospace Engineering | Counseling | Kinesiology |
| Applied Mathematics | Criminal Justice and | Mechanical Engineering |
| Astronomy | Criminology | Medical Physics |
| Bioengineering | Electrical Engineering | Microbiology |
| Bioinformatics and | Exercise Physiology | Nursing |
| Medical Informatics | Geography | Nutritional Sciences |
| Biology | Geological Sciences | Physics |
| Business Administration | $n$ Gerontology | Psychology |
| Chemistry | Homeland Security | Public Health |
| Child Development | Hospitality and Tourism | Regulatory Affairs |
| Civil Engineering | Management | Rehabilitation Counseling |
| Computational Science | Information Systems | 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
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 (Conditional Classified, Credential, and Certificate). Persons wishing to enroll in a credential in professional education or a 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 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 (Conditional 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.csumentor.edu 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 in May and 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 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) Susan Baxter, Executive Director

Created in 1987 as a systemwide program, the California State University Program for Education and Research in Biotechnology (CSUPERB) develops a professional biotechnology workforce by mobilizing and supporting collaborative CSU student and faculty research, innovating educational practices, and responding to and anticipating the needs of the life science industry. The CSUPERB program office is hosted at San Diego State University. CSUPERB promotes biotechnology workforce development by supporting innovative coursework and programs, real-world research experiences, and core resources for faculty and students at all 23 CSU campuses. The program involves students and faculty from life sciences, physical sciences, clinical sciences, engineering, agriculture, mathematics, business and computer science departments. CSUPERB organizes the annual CSU Biotechnology Symposium and serves as the official biotechnology liaison for the CSU with government, educational, and industry partners. In addition, CSUPERB administers and manages a Small Business Administration (SBA) award to develop biotechnology industry responsive curricula.

CSUPERB recognizes that modern biotechnology preparation requires the integration of coursework, hands-on practice and participation in multi-disciplinary, team-based research projects. CSUPERB grants and awards programs have been developed to support these activities systemwide. Programs include: Howell-CSUPERB Research Scholars Awards for undergraduate student researchers, the Crellin Pauling Student Teaching Awards, the Don Eden Graduate Student Research Awards, Travel Grants programs for students and faculty, the New Investigator Grants, the Research Development Grants, the Entrepreneurial Joint Venture Grants, and Biotechnology Programmatic Development Grants. These programs award more than $\$ 650,000$ to CSU faculty and students annually.

CSUPERB programs and activities are administered by an Executive Director, a strategic planning council composed of faculty and deans from CSU campuses, and a faculty consensus group of four faculty representatives from each CSU campus. CSUPERB is overseen by a Presidents' Commission of CSU presidents from CSU Channel Islands, CSU Los Angeles, CSU San Marcos, Humboldt State University, San Jose State University, and an Executive Vice Chancellor. Visit the program websites at http://www.calstate.edu/ csuperb and http://www.csubiocompass.org 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.

## Regulatory Compliance

## Conflict of Interest Committee

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 https://newscenter.sdsu.edu/researchaffairs/coi.aspx?.

## Institutional Animal Care and Use Committee

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 https://newscenter.sdsu.edu/ researchaffairs/animalcare.aspx.

## Institutional Biosafety Committee

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 http://bfa.sdsu.edu/ehs/ or contact the Institutional Biosafety officer at 619-594-2865. For information specific to the Institutional Biosafety Committee, contact the Division of Research Affairs, 619-594-0905 or e-mail ibc@mail.sdsu.edu. The website is https://newscenter.sdsu.edu/researchaffairs/ibc.aspx.

## 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://gra.sdsu.edu/research/irb, e-mail irb@mail.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. Alvin Coox, Professor of History; Drs. James Flood and Diane K. Lapp, Professors of Education; Dr. Maurice S. Friedman, Professor of Religious Studies; Dr. Arthur Getis, The Stephen and Mary Birch Foundation Chair in Geographical Study; Dr. Dipak K. Gupta, Professor of Political Science; Dr. Robert Kaplan, Professor of Psychology; Dr. E. Percil Stanford, Professor of Social Work; Dr. Donna J. Thal, Professor of Speech, Language, and Hearing Sciences; Dr. Helen Wallace, Professor of Public Health; Dr. David Ward-Steinman, Professor of Music; Dr. Catherine Yi-yu Cho Woo, Professor of Chinese; 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; 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; and Dr. Joanne M. Ferraro, Professor of History. The website is http://newscenter.sdsu.edu/researchaffairs/researchlectures.aspx.

## University Grants Program

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://gra.sdsu.edu/research/ugp.

## University Copyrights and Patents Committee

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 http://gra.sdsu.edu/grad/research/intproptechdev.html.

## Student Research Committee

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://gra.sdsu.edu/research/srs.

## 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 http://tto.sdsu.edu.

# College of Arts and Letters 

## Administration

Dean: Paul Wong
Associate Dean: Eniko Csomay
Associate Dean: Mahdavi M. McCall
Assistant Dean for Student Affairs: Jacqueline Severance (Interim)
Director of Development: Janee Shaw
Director of Resource 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 19 academic departments and several interdisciplinary programs, each of which is designed to help students to understand their role in society and to develop aesthetic sensibilities. Arts and Letters courses are offered to explore the experiences of men and women 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.

## 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

## Master's Degrees

Anthropology (M.A.), Asian Studies (M.A.), 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 College of Business Administration, 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 College of Business Administration), International Security and Conflict Resolution (B.A.; jointly with the College of Professional Studies and Fine Arts and the College of Sciences), Japanese (B.A.), Latin American Studies (B.A.), Lesbian, Gay, Bisexual, and Transgender 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.).

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, Environment and Society, 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, and Transgender Studies; Linguistics, Philosophy, Political Science, Portuguese, Religious Studies, Rhetoric and Writing Studies, Russian, Sociology, Spanish, Teaching English as a Second or Foreign Language (TESL/TEFL), United StatesMexican Border Studies, Women's Studies.

## Preprofessional Curriculum <br> Prelegal

## Certificate Programs

Children's/Adolescent Literature, Computational Linguistics, Geographic Information Science, Korean Studies, Professional Writing, Public Law, Spanish Translation and Interpretation Studies, Teaching English as a Second or Foreign Language (TESL/TEFL), Teaching of Writing, United States-Mexico Border Studies, Women's Studies.

## Research Centers and Institutes

## Africana Center for Cultural Literacy and Research JoAnne Cornwell and Francis Nesbitt, Co-Directors

The Africana Center for Cultural Literacy and Research provides independent and collaborative projects (across a broad spectrum of academic disciplines) that create professional development opportunities with an Africana cultural focus for students, faculty and staff; research opportunities for students and faculty; and culturally enhanced teaching opportunities for SDSU faculty. The center's programs also provide venues for community service which focus on Africana cultural groups.

For more information regarding the Africana Center, contact Dr Cornwell at 619-594-4131.

## Center for Asian and Pacific Studies Wilburn N. Hansen, 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.

## Bread and Roses Center

## Doreen Mattingly and Kimala 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 center brings activists, artists, and scholars committed to feminist social change to SDSU to network with colleagues and students on the campus and in the San Diego community, and to reflect upon and reorient their practices. Visiting residents of the center benefit from the opportunity for rejuvenation. The center also supports a strong international community of artists, students, scholars, and community activists working to achieve equality for women. The center hosts such activities as colloquia, festivals, readings, exhibitions, and special events. For those wishing to expand their knowledge of women's movements, the center provides a forum for courses, guest lectures, and workshops. The center enhances two missions of SDSU: promoting internationalization of the curriculum and students' learning experiences, and reaching out to, and positively interacting with, the larger San Diego community.

The Bread and Roses Center is housed in the Department of Women's Studies and can be reached by contacting the department office at 619-594-2952 or on the website at http://www-rohan.sdsu.edu/~wsweb/bread_and_roses.htm.

## Chinese Studies Institute <br> Li-Rong Lilly Cheng, Director

The Chinese Studies Institute coordinates and supports on-campus teaching and research related to the Chinese speaking world. The institute develops and fosters faculty and student exchange programs with universities and institutions of higher learning. Various cultural programs on the Chinese speaking world and activities on campus and in the community promote cultural awareness and understanding. The development of Chinese language publications, audiovisual materials, periodicals, newspapers, and other resources on campus fosters relationships between San Diego State University and the Chinese community, as well as nurtures friendship between the Chinese and American peoples. For more information, visit the website at http://www-rohan.sdsu.edu/~csi/index.htm.

## Confucius Institute

Paul Wong, Executive Director
The Confucius Institute (CI) at San Diego State University (SDSU) was established in collaboration with the Confucius Institute Headquarters (Hanban), the executive body of the Chinese Language Council International, a non-governmental and non-profit organization affiliated with the Ministry of Education of China. Housed in the College of Arts and Letters, the purposes of the Cl of SDSU are to strengthen educational cooperation between China and the United States and to promote development of Chinese language education at the primary, secondary, and tertiary levels as well as at the community colleges. The Cl at SDSU focuses especially on teacher training by offering both on-site and online classes while utilizing the most advanced language teaching pedagogy and technology. The CI at SDSU has a partner institution in China - Xiamen University, a distinguished national research university.

In conjunction with the Chinese program in the Department of Linguistics and Asian/Middle Eastern Languages, as well as other relevant academic units at SDSU, the institute supports and promotes the following activities:

- A teaching-training service center;
- Teach Chinese language and provide Chinese language teaching resources;
- Train Chinese language instructors;
- Hold Chinese proficiency tests and tests for the certification of Chinese language teachers;
- Provide information and consultative services concerning China's education, culture, economy, and so forth;
- Conduct language, trade mission, and cultural exchange activities;
- Conduct other activities in collaboration with Hanban and Xiamen University.


## Institute of Druze Studies (IDS) Samy Swayd, Director

The Institute of Druze Studies (IDS) is an academic non-profit organization dedicated to research and discourse on the Druzes and related topics. The Druzes are a Middle Eastern minority group that live predominantly in the mountainous regions of today's Lebanon, Syria, Jordan, Israel, and with smaller numbers elsewhere around the world. More than 25,000 Druzes live in the United States with California as the main center of the American Druze Society (ADS). The Druze sect began in Cairo and has survived for almost one thousand years.

The IDS aims to 1) provide information on Druze history, society, and faith; 2) encourage research and studies on historical and contemporary Druze communities; and 3) promote academic discourse about other immigrant religious communities. The IDS pursues these objectives through an international multidisciplinary conference, an academic journal, and a newsletter. The IDS participates in professional conferences and provides guest lectures to interested organizations.

For more information, call the office at 619-594-1880 or the Department of Religious Studies at 619-594-5185, FAX 619-5941004, or http://www.druzestudies.org.

## Center for Earth Systems Analysis Research (CESAR) <br> Allen Hope, Piotr Jankowski, Douglas Stow, Co-Directors

The Stephen and Mary Birch Foundation Center for Earth Systems Analysis Research (CESAR) was founded in 1986 as a computer-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 computer-based map and image data processing and spatial simulation 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 619-594-8042 or 619-594-5437 or dave@geography.sdsu.edu.

## Institute for Ethics and Public Affairs Peter C. Atterton, Director

The Institute for Ethics and Public Affairs at San Diego State University seeks to promote critical thinking about moral issues that are often complex in nature. It aims both 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. The institute is housed in the Department of Philosophy, but 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.

## Center for European Studies <br> Veronica Shapovalov, Director

The Center for European Studies, through its associated faculty and students, is committed to the multidisciplinary study of Europe and its dynamic and evolving calculus of nations, cultures, languages, and perspectives. The center is a vehicle for fostering appreciation of Europe, the societies and cultures within its geographical boundaries, and the ideas that make up various European realities. The center
will develop 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 Veronica Shapovalov in the Department of European Studies at 619-594-5111, 619-594-7147, or veronica.shapovalov@sdsu.edu.

## Charles Hostler Institute on World Affairs Paul Wong, Director

The Charles Hostler Institute on World Affairs, founded in 1942, is beginning its $65^{\text {th }}$ year at San Diego State University. It is the second oldest organization of its kind west of the Mississippi River. Its purpose is to make available to the SDSU community, and to the people of Southern California, a forum for the discussion of critical topics in international affairs. This purpose is accomplished primarily by inviting distinguished authorities to address the institute on issues of contemporary international import. The institute has hosted ambassadors to the U.S. from Australia, Belgium, Brazil, China, Czechoslovakia, Finland, Germany, Greece, Hungary, India, Italy, Jordan, Korea, Malaysia, Mexico, Netherlands, Nigeria, Pakistan, Singapore, Sweden, Syria, Thailand, and Yemen. Distinguished speakers have included Nobel Laureates Willard Libby, Linus Pauling, and Harold Urey, as well as Professors Hans Morgenthau and Robert Scalapino, British Ambassador to the United Nations Lord Caradon, American statesman Ralph Bunche, California Governor Pat Brown, French diplomat and author Romain Gary, Austrian Chancellor Kurt Schuschnigg, Russian Premier Alexander Kerensky, and USAF Chief of Staff and SDSU graduate General Merril McPeak. American politicians, military and government officials, diplomatic and governmental representatives from Africa, Asia, Europe, Latin America, and the Middle East have also participated in institute sessions over the last 60 years.

Institute events are held on campus, in Hardy Tower, Room 140 from 7-9:30 p.m. on Thursday evenings, during the spring semester.

For more than half a century, the institute has functioned according to the motto - AUDIATUR ET ALTER A PARS (Let The Other Side Be Heard). Given today's pressing problems of international affairs and the obligation of an excellent university to help inform students, faculty, and the wider community regarding these problems, the Charles Hostler Institute on World Affairs plays a critical role in the educational mission of SDSU.

## 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. 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 modern technology application 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 focus on data mining and advanced visual techniques, as well as building strategies and solutions for government and private industry. To organically incubate innovation, CICS aims to catalyze and nurture partnerships and collaborations in strategic regions globally.

The center has 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 International Business Education and Research (CIBER) <br> Mark J. Ballam, Managing Director Siv Della Maestra, Assistant Director

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 33 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 College of Business Administration, and collaborates with programs and colleges across the university. For more information, visit http://www.sdsu.edu/ciber.

## International Population Center (InterPop) John R. Weeks, Director

The International Population Center (InterPop) 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, InterPop 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 http://geography.sdsu.edu/Research/Projects/IPC/ipc2.html.

## International Studies Education Project (ISTEP) Elsie Begler, Director

The International Studies Education Project (ISTEP) 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.

ISTEP 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 ISTEP 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. Project activities and resources are publicized through the ISTEP website at http://istep.sdsu.edu.

For more information, call 619-594-2412 or 619-594-1105 or visit ISTEP's website at http://istep.sdsu.edu.

## International Technology and Trade Network (ITTN) Marc Siegel, Director

The International Technology and Trade Network (ITTN), an institute of San Diego State University's Center for International Business Education and Research (CIBER), is a collaborative offering of the College of Arts and Letters and the College of Business Administration. The objective of the ITTN is to promote methods for creating a stable economic environment for transnational business, trade, and research. The institute will seek ways to use business as a catalyst for regional peace and cross-border economic development. This effort will focus on networking together business assistance organizations, academic institutions, and research centers in regions of conflict and emerging economies. We will establish a virtual business assistance network that will take advantage of the latest Internet, information, and telecommunications technologies to provide business-to-business and organizational links. We will use these technologies to share information as well as provide educational, training and distance learning opportunities to participating members of the network.

## Center for Islamic and Arabic Studies Farid Abdel-Nour, Director

The Center for Islamic and Arabic Studies administers the minor in Islamic and Arabic Studies, and the major in Social Science: Emphasis on 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, contact Farid Abdel-Nour at abdelnou@mail.sdsu. edu or 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. Since 1976, the Center for Latin American Studies has been designated a National Resource Center for Latin American Studies by the United States Department of Education and funded through a Title VI grant, in consortium with the Center for Iberian and Latin American Studies at the University of California, San Diego. CLAS, along with CIBER, is one of two Title VI funded centers on the San Diego State University campus. In conjunction with this award, 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 College of Business Administration. In addition, the center is involved with the development of innovative methods of instruction in Spanish, Portuguese, and Mixtec; 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.

## Lipinsky Institute Risa Levitt Kohn, Director

The Lipinsky Institute supports the advancement for community outreach and the annual visiting Israeli professorship. To learn more, visit the website at http://jewishstudies.sdsu.edu.

## National Center for the Study of <br> Children's Literature (NCSCL) <br> Alida L. Allison, 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 M.A. 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://childilit.sdsu.edu.

## Language Acquisition Resource Center (LARC) National Language Training Center (LTC) Mary Ann Lyman-Hager, Director, LARC and LTC Chris Brown, Managing Director, LARC and LTC Trevor Shanklin, LARC Laboratory Director

SDSU created the Language Acquisition Resource Center (LARC) in 1989 to teach foreign languages more effectively using technology. From 1990-2014, LARC served as a national Language Resource Center (LRC), with funding from the U.S. Department of Education. Since 2011, LARC serves as a national Language Training Center to train military personnel in critical world languages and cultures. LARC laboratories and facilities serve area K-16 teachers, enabling them to do research in second language acquisition and to assess language proficiency. LARC staff and faculty provide professional development, experiences for teachers focused on enhancing cross-cultural competence and developing language competence, particularly in less commonly-taught languages. Students and teachers use the LARC laboratories to explore advanced technologies and to enhance language learning experiences. SDSU's center has one of the nation's finest multimedia collections and language laboratory facilities, with digitizing and desktop video conferencing capabilities, a research library, smart classrooms, and faculty offices. The laboratories also serve foreign language students in several departments (European Studies, Linguistics and Asian/Middle Eastern Languages, and Spanish and Portuguese Languages and Literatures).

LARC has enhanced its infrastructure and Internet capabilities to explore and develop models of distributed and distance learning, as well as digital humanities materials. These models reflect the changing demographics of SDSU students and require new curricula to reflect student learning preferences. Our archives house learning objects, authentic materials, lesson plans, and courses and allow for online contributions from national and international collaborators.

LARC hosts companion initiatives, STARTALK Teacher and Student summer programs, focusing on youth and critical languages; ProjectGO (Project Global Officers), whose major purpose is to create opportunities for learners of Arabic, Persian, Russian, and other world languages to reach advanced levels of proficiency; and SAILN (the Southern Area International Language Network), offers professional development to world language teachers in several counties of Southern California.

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

## Center for Qualitative Research <br> Sheldon X. Zhang, Interim Director

The Center for Qualitative Research, 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. Over 20 departments and programs from across the seven colleges of SDSU are represented in the center's core group of participants. 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 rather than quantitative.
- 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. In particular, the center sponsors several colloquia each academic year where faculty and students can showcase their work to an appreciative audience. In addition, the center archives and publicly displays samples of ethnographic work.
- Furnish a connection between the intellectual community of San Diego State University and surrounding communities by promoting locally relevant research.
For more information, contact the center at 619-594-2783, CQR@ sdsu.edu, or visit http://www-rohan.sdsu.edu/~sdsusoci.


## 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 StatesMexican 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.

## Center for Interdisciplinary Studies of Youth and Space (ISYS)

Stuart C. Aitken, Director; Tom Herman, Managing Director Fernando Bosco, Doreen Mattingly, Ramona Pérez, Co-Directors

ISYS is an interdisciplinary collective of academic and community interests. The mission of the center is to support research on children, families, and space. It includes not only international scholarship and global perspectives on young people and families, 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 unique process of identity formation and the relationships through which young people construct their lived spaces. Consequently, ISYS 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 elsewhere including a faculty and graduate student exchange program with the Norway's National Technological University (NTNU) in Trondheim and its National Center for Childhood Research (NOSEB). ISYS sponsors the international Routledge journal, Children's Geographies: Advancing interdisciplinary understanding of younger people's lives. In addition to this international, global focus, ISYS supports research in San Diego and Tijuana that relates to children, families and communities.

ISYS is located in Storm Hall, Room324. For information call619-5946498, or visit http://geography.sdsu.edu/Research/Projects/ISYS/.

## Social Science Research Laboratory (SSRL) Paul Wong, Director

Established in 1974, the Social Science Research Laboratory (SSRL) was founded to support social research at San Diego State University and in the San Diego community. SSRL currently provides survey research and program evaluation services to university faculty and administrators, local government agencies, and non-profit organizations. SSRL has completed program evaluations in a variety of program areas, including youth violence prevention, LGBT health, substance abuse, and HIV prevention. Services available to clients include program evaluation, focus groups, telephone, web, mail, intercept, multi-mode and multi-language surveys, research design, and data analysis.

SSRL also provides graduate-level training in survey research methodology and practices through its Internship in Applied Survey Research and Program Evaluation. The goal of the internship is to provide eligible graduate students with field experience in survey research and program evaluation and an opportunity to apply the information and skills learned in their graduate program curriculum in a real-world social research setting.

## College of Business Administration

The College of Business Administration and the School of Accountancy are accredited by AACSB International-The Association to Advance Collegiate Schools of Business-at both the undergraduate and graduate levels. Several College of Business Administration programs are registered with the Certified Financial Planner Board of Standards. Visit the College of Business Administration website at http://www.sdsu.edu/business.

## Administration

Dean: J. Dennis Cradit
Associate Dean for Academic Affairs: David P. Ely (Interim)
Assistant Dean for Student Affairs: Tita L. Gray
Director of Assessment: Kathleen A. Krentler
Director of Graduate Programs: Nikhil P. Varaiya
Director of Undergraduate Programs: Gary M. Grudnitski
Director of Graduate Career Management Center: Beverly K. Bracker
Director of Resource Management: Davette Kawachi

## Mission of the College of Business <br> Administration

The mission of the College of Business Administration at SDSU is to maintain a challenging learning environment that fosters excellence in business education and develops business professionals through innovative programs, applied learning, research, and collaboration with alumni and the local business community. Our programs reflect the international, entrepreneurial, hi-tech, and tourism character of our region and provide opportunities for students and faculty to integrate their academic work with experience in the San Diego community.

## General Information

All undergraduate and graduate programs have enjoyed continuous accreditation since their points of first application. In addition to a commitment to maintain a high quality, accredited program, the College has the following objectives: (1) academic programs that prepare students with the knowledge and skills needed to contribute to business and society as managers and professionals; (2) cooperation and mutual responsibility among faculty, staff, and students for learning and research; (3) opportunities for students to integrate their academic work with experience in the community; (4) faculty who are active as teachers and scholars and who share their professional expertise with students and the community; (5) staff members who maintain and improve their technical and interpersonal skills in order to contribute to the development and success of College programs; (6) programs that reflect the international and entrepreneurial character of our region; (7) physical and technical facilities that support program requirements; and (8) an environment that offers opportunities for students, faculty, and staff of diverse backgrounds to pursue their educational and career goals.

The College of Business Administration at SDSU aspires to be the educational backbone of the San Diego business community. To credibly serve one of the most dynamic regions in the nation and the world, we must achieve high national rankings in both undergraduate and graduate education and earn a national and international reputation for excellence in research. These objectives require us to understand and proactively adapt to the global and technological forces and the environmental, ethical and resource imperatives that are shaping the 21 st century.

## 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 Business Administration.

## 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), 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

Accounting, Business Administration (available at Imperial Valley Campus only), Executive Financial Planner, Personal Financial Planning.

## Research Centers and Institutes

## Center for Accounting in the Public Interest Martha Doran, 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

## 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 (a) developing innovative curriculum, (b) fostering cutting-edge research, and (c) offering influential practitioner education. CGl 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. CGI has sponsored annual research events for an international network of scholars for more than a decade, and hosted dedicated senior-scholar research symposia in 2009, 2011, and 2013. The institute also offers lectures and panels for students, faculty, and the public featuring prestigious investors, directors, and corporate executives.

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

## Lavin Entrepreneurship Center Alex F. DeNoble, Executive Director Bernhard Schroeder, Director, Lavin Center Programs

The Lavin Entrepreneurship Center serves students and companies that contribute to the emerging growth sector of the regional business community. The mission of the Lavin Center is to develop educational 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) organizational consulting and development.

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:

- Venture Challenge, a top global MBA business plan competition;
- LeanModel start-up California university competition;
- Business Forum for executives of closely-held/family businesses;
- QUALCOMM Social Entrepreneur Intern program;
- Center for the Commercialization of Advanced Technology;
- WebCompass, a undergraduate internship program aiding non-profits;
- L. Robert Payne Distinguished Entrepreneur Lecture Series;
- VentureStart Competition, business plan competition for all SDSU students;
- Lavin Entrepreneurs, an undergraduate cohort mentored by senior executives;
- Entrepreneur Day, yearly campuswide celebration of SDSU entrepreneurs;
- Entrepreneurs for Peace, global entrepreneur effort to stimulate peace.
For further information, contact the Lavin Center in the Gateway Center, Suite 1502, 619-594-2781, FAX 619-594-8879, and at http://lavincenter.sdsu.edu.


## Institute for Inclusiveness and Diversity in Organizations (IIDO) <br> 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 College of Business Administration among scholars and the business community. For further information, contact the IIDO at 619-594-2699, Beth.Chung@sdsu.edu, or at http://www.sdsu.edu/iido.

## Center for International Business Education and Research (CIBER) <br> Mark J. Ballam, Managing Director <br> Martina Musteen, Faculty Director <br> A. Paige Bryant, Project 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 33 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 College of Business Administration, and collaborates with programs and colleges across the university. For more information, visit http://www.sdsu.edu/ciber.

## International Institute for the Commercialization of Biomedical Innovation (IICBI)

The International Institute for the Commercialization of Biomedical Innovation (IICBI) seeks to bring the world's biomedical innovations to the marketplace. The goal of the IICBI is to work with leading universities to expedite biomedical concepts into development; and then move them forward into the marketplace. The IICBI works with national as well as international universities to develop and bring new medical devices, apparatuses, pharmaceuticals, and treatments to the marketplace. It is partnered with other universities to identify and in-license technologies. Students, faculty, and key life science business leaders work together to develop: (1) a business plan; (2) an IP strategy; (3) a patent for a disclosure, regulatory plan; (4) a competitive strategy for the technology; and (5) identify and pursue commercial partners to develop and market the end product. The mission of the IICBI is to provide the expertise and infrastructures to support the development and commercialization of biomedical innovation from universities across the globe that currently lack the ability to bridge the gap between concept generation and product launch.

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

 Marie-Eve Lachance and Ning Tang, Co-DirectorsThe 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 web-based 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 mlachanc@mail.sdsu.edu.

The Corky McMillin Center for Real Estate (CMCRE)
Mehdi Salehizadeh, Interim Director

## Melissa Abeyta, Center Coordinator

The Corky McMillin Center for Real Estate was established in 2009 with a donation from the McMillin family who own one of San Diego's most successful real estate and development companies. The mission of the center is to improve the educational experience for real estate students at SDSU, foster academic research in real estate, and to act as a resource for real estate professionals, government, and industry organizations.

The center supports the real estate program through a variety of enrichment activities that supplement the curriculum and bring students in contact with professionals and potential employers. The center hosts an array of real estate related events each year, aimed at promoting networking amongst professionals and students, and informing the community of various real estate issues. The center also sponsors a SDSU team in a local Real Estate Case Study Competition for undergraduate students.

The director of the center is a principal spokesperson for SDSU on real estate issues. For more information, please contact the center at realestate@mail.sdsu.edu.

## Real Estate and Land Use Institute (RELUI) Andrew Q. Do, Director

Established in 1983, the Real Estate and Land Use Institute (RELUI) is the first systemwide research-oriented institute of its kind in the 23 -campus California State University system. The San Diego regional office of RELUI is located in the College of Business Administration.

CSU-RELUI's mission is to promote education and research in real estate and land use-related areas. In support of this mission, the RELUI seeks to support, coordinate, and manage systemwide and intercampus research activities, to maintain liaisons with government and private agencies with an interest in public policy, and to provide scholarships and grants to qualified SDSU students.

At San Diego State University, the RELUI regional director is appointed by the campus president to serve as a member of the CSU Advisory Board of the California Real Estate Endowment Fund. For more information, contact Dr. Andrew Do at 619-594-5324, andrew.do@sdsu.edu.


# College of Education 

## Administration

Dean: Joseph F. Johnson
Associate Dean: Nancy Farnan (Interim)
Associate Dean for Faculty Development, Research, and Special Projects
Assistant Dean for Student Affairs: Patricia Lozada-Santone
Assistant Dean for Special Projects: Tanis Starck
Doctoral Programs: Joanne Lobato, Ian Pumpian,
Rafaela M. Santa Cruz, J. Luke Wood
Manager of Budget and Analysis: Julie White
Operations and Support Services Analyst: Elsa Tapia
Manager of Office of Student Services: Lisa McCully

## 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 <br> Ph.D. in Education

Ph.D. in Mathematics and Science Education
Ed.D. in Educational Leadership
Concentration in PreK-12 Leadership
Concentration in Community College/Postsecondary Leadership

## Educational Specialist

Ed.S. in School Psychology (M.A./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.)

|  | Minors |
| :--- | :--- |
| Child Development, Counseling and Social Change, |  |
| Leadership Development |  |

* Standards and authorizations are being reviewed and revised by the California Commission on Teacher Credentialing.


## Specialist Credentials

Reading/Language Arts
Bilingual Cross-Cultural Specialist
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
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, Distance Education, Dual Language for Academic Literacy, Early Care and Education, Early Childhood-Socio-Emotional and Behavior Regulation Intervention Specialist, Early Childhood Special Education Authorization, Educational Facility Planning (offered through College of Extended Studies), English Language Development for Academic Literacy, Family Life Education, Institutional Research, Planning, and Assessment, Instructional Design, Instructional Technology, Mathematics Specialist, Psychiatric Rehabilitation, Reading, Rehabilitation Administration, Rehabilitation Counseling, Supported Employment and Transition Specialist, Workforce Education and Lifelong Learning.

## Research Centers and Institutes <br> Center for Counseling and School Psychology Jan Ewing, 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. For more information, visit the website at http://www.psychology.sdsu.edu/advising/counseling\ psycholoy.htm.

## Center for Equity and Biliteracy Education Research (CEBER) <br> Alberto M. Ochoa, Director

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.

## Interwork Institute

Caren L. Sax and Marilee Bresciani Ludvik, Co-Directors
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 Center for Emerging Leadership (CEL) supports and educates youth and young adults with developmental disabilities through peer-to-peer mentorship as they transition into adulthood as leaders. This is funded by the Department of Health and Human Services, Administration for Children and Families, Administration on Developmental Disabilities. This was initially funded as a center under the corresponding grant competition in 2004.
- 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 3590 Camino del Rio North in Mission Valley. For more information visit the website at http://interwork.sdsu.edu.


## Center for Teaching Critical Thinking and Creativity Luke 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.

## San Diego State University Literacy Center Pamela J. Ross, 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 and the Reading Recovery ${ }^{\circledR}$ Program. Credentialed teachers enrolled in graduate reading, certificate, and credential programs as well as professional staff conduct the 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/.

## National Center for Urban School Transformation 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 (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 faculty and staff of the Pre-College Institute (PCI), an institute to promote the advancement of pre-college education, implements programs to enhance teaching and learning in multicultural settings and studies their outcomes. The institute, operating from the university's historic strength in teacher education and its proximity to Mexico, delivers services geared towards promoting educational advancement among pre-college students from low-income families. The institute also supports continuous professional enhancement of teachers from all cultural backgrounds and conducts systematic research and evaluation of the programs that deliver these services.

The institute offers services through five federally funded TRIO programs and partnerships with the Colleges of Engineering, Health and Human Services, and Sciences, as well as the Division of Undergraduate Studies and the Sweetwater Gear Up partnership with Compact for Success. The institute's international branch offers exchange opportunities for university faculty and students to visit and study in other countries. To learn more, visit the website at http://www-rohan.sdsu.edu/dept/sdsutrio/.

## 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 and Sarah Maheronnaghsh, 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 Excellence in School Counseling and Leadership (CESCaL) Patricia A. Hatch, Director

The Center for Excellence in School Counseling and Leadership (CESCaL) seeks to educate, collaborate, deepen understanding of, and improve partnerships between school counselors and administrative teams, graduate programs, and professional associations. The mission of CESCaL is to promote excellence in the field of school counseling and to assist school counselors, and their site and central office administrators, as they design, implement, and evaluate their school counseling programs. CESCaL provides training and consultation from state and national leaders in school counseling and administration with experience in implementing evidence-based practices and the ASCA National Model ${ }^{\circledR}$ for school counseling programs. CESCaL seeks to resolve critical issues that impede the operational efficiency, institutional legitimacy, and political social capital within the profession of school counseling. The center's website at http://www.cescal.org disseminates exemplars for educator use as a service to school counselors, school counselor educators, and administrators who supervise school counselors Supporting Students ~ Saving Lives, a division of CESCaL, provides training for counselors and other educators to better meet the needs of LGBTQIA youth.

## Center for Family, School, and Community Engagement Jeana Preston, Director

The Center for Family, School, and Community Engagement was established to link the university to the educational pathways of children from "cradle through college." The center's mission is to build the capacity of families, educators, and community partners to advance the education of children together by providing (1) platforms for engaging in collaborative problem solving; (2) leadership development for parents and educators to work together; and (3) through new research that shines a light on partnership practices to support the healthy development and school success of children. Improving educational outcomes for children in our communities is the shared responsibility of families, educators from preschool through the college years ( $\mathrm{P}-16$ ) and their communities. The center promotes partnership approaches that engage all stakeholders to advance practical solutions and actions to ensure healthy development and academic success for all children across the continuum from birth, through each level of schooling, college, and career.

The California Parent Center (CPC) is located within the Center for Family, School, and Community Engagement, under the direction of the Department of Child and Family Development in the College of Education. CPC functions as a statewide technical assistance center for school-family-community partnerships focused on assisting educators and parent leaders at preschool, elementary, and secondary levels to work in partnership to improve academic outcomes for students. CPC works directly with school districts to implement achievement-focused family, school, and community partnerships as a key strategy for turning around low performing schools. CPC works in consultation with the California Department of Education Title I Office.

For additional information, contact Jeana Preston, Director California Parent Center at 619-594-4756 or 1-877-972-7368. Visit the website at http://parent.sdsu.edu.


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# College of Engineering 

## Administration

Dean: Morteza M. Mehrabadi
Associate Dean: Bruce D. Westermo
Assistant Dean for Student Affairs: Theresa Garcia
Director of Doctoral Programs: Eugene A. Olevsky

## 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

 AssociationThe 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, Inc., 415 North Charles Street, Baltimore, MD 21201, telephone: (410) 347-7700.

## 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;
Electrical and Computer Engineering; Mechanical and Aerospace Engineering;

Structural Engineering

## Master's Degrees

Master of Science (M.S.)
Aerospace Engineering, Bioengineering,
Civil Engineering
Electrical Engineering, Mechanical Engineering

## 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 <br> Engineering

## Certificate Program

Rehabilitation Technology

## Research Centers and Institutes

## Communication Systems and Signal Processing Institute <br> 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.

## Concrete Research Institute M. 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. Learn more by visiting the website at http://engineering.sdsu.edu/~sfrc/.

## Energy Engineering Institute Asfaw Beyene, Director

The Energy Engineering Institute 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://engineering.sdsu.edu/energy.html.

## Center for Industrial Training and Engineering Research (CITER) <br> Gustaaf 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

# College of Health and Human Services 

## Administration

Dean: Marilyn Newhoff
Associate Dean: Guadalupe X. Ayala
Associate Dean: Larry S. Verity
Assistant Dean for Student Affairs: Donna M. Daly

## 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 Graduate 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 actions. 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 Abuse, Ph.D. in Language and Communicative Disorders, Ph.D. in Public Health, Doctor of Nursing Practice (DNP), 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<br>Audiology<br>Interdisciplinary Research on Substance Use Language and Communicative Disorders<br>Nursing Practice<br>Physical Therapy<br>Public Health (Epidemiology, Global Health, Health Behavioral Science)

## Master's Degrees

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.), Health Science (B.S.), Kinesiology (B.S.), Nursing (B.S.), Social Work (B.A.), Speech, Language, and Hearing Sciences (B.A.).

## Minors

Gerontology; Health Science; Social Work; Speech, Language, and Hearing Sciences (ASL and Deaf Studies).

## 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

## Center for Alcohol and Drug Studies Susan I. Woodruff, Director

The center was established in 1985 by the School of Social Work as the Center on Substance Abuse. In 2003, the emphasis was changed to research and evaluation, while maintaining its primary service program, a drunk driving education and treatment program. The center is actively engaged in conducting alcohol and other drug research and evaluation projects. Over the past decade, the center has received numerous federal, state, and county grants and contracts and has several ongoing projects including the NIH funded College Party and Bar Environmental Prevention Project and an Evaluation of California's State Prevention Grants. In addition, the center operates the Central District Driving Under the Influence Program, which provides education and counseling services for court-ordered offenders in the central judicial district of San Diego county. The center is located at 6386 Alvarado Road, Suite 224, 619-229-2340. The Central District Driving Under the Influence Program is located at 9245 Sky Park Court, Suite 101, 858-467-6810.

Visit http://www.centerforaod.sdsu.edu for more information.

## 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/.

## Institute for Behavioral and Community Health (IBACH) Gregory A. Talavera and Guadalupe X. Ayala, Co-Directors

The Institute for Behavioral and Community Health (IBACH) is housed at 9245 Skypark Court, Suite 221, San Diego, CA 92113. The institute, formerly known as the Center for Behavioral Medicine, was established in 1982 for the purpose of promoting research and academic programs relevant to the applications of behavioral science principles to medicine and health care. The institute has seven investigators from three different colleges. The interdisciplinary institute encourages participation from all of the university colleges and departments. Currently, active investigators come from the Departments of Exercise and Nutritional Sciences, Psychology, and the Graduate School of Public Health. Current institute projects involve collaboration between scientists and clinicians from a variety of specialties as well as a variety of other institutions, including Scripps Clinic and Research Foundation, the University of California, San Diego Medical Center,
and the Children's Hospital and Health Center. Funding for the institute comes from federal and private foundation grants including several National Institutes of Health agencies. Current sponsors include the National Cancer Institute, National Heart, Lung and Blood Institute, the State of California Department of Health Services, and the University of California Tobacco Related Disease Research Program.

The institute provides important research experiences to diverse students who intend to pursue related careers and offers opportunities for project staff and graduate students to participate in community interventions.

Visit http://www.ibachsd.org to learn more.

## Center for Behavioral Epidemiology and Community Health (CBEACH) <br> Melbourne F. Hovell, Executive Director

Administered through the Graduate School of Public Health, the center was established for the purpose of promoting research to study behavior that prevents or contributes to the cause 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 behavior - 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. C-BEACH conducts scientific investigations into the following broad areas: behavioral epidemiology, measurement, and interventions (clinical and community-based).

For more information, visit http://www.sci.sdsu.edu/c-beach/.

## Consensus Organizing Center Jessica Robinson, Director

The Consensus Organizing Center is administered through the School of Social Work. The center'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 social workers, high school students, foster youth, and community leaders. Specific activities include developing a fellowship program for high school students and provide employment opportunities for undergraduate and graduate students.

The center can be contacted at 619-594-4813 or at http://www.consensus.sdsu.edu.

## Heart Institute <br> 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.

## 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 center is to make university faculty and staff available to public and private social services agencies in the region by providing expertise and technical assistance in curriculum development, in-service training, organizational development, evaluation, and research. The academy develops high quality competency based curriculum on select topics for social services agencies in the region; provides quality training to service providers and administrators employed in social services agencies; engages in research and evaluation to improve the quality, accountability and responsiveness of human service agencies; and, develops highly competent executives in the Southern California region who will have the skills, knowledge, and experience to effectively guide organizational change and development.

The academy has extensive experience in managing contracts with multiple partners and organizations/agencies, providing specialized services, including: curriculum development, multi-disciplinary compe-tency-based trainings, workforce analysis, staff retention consultation, research, organizational development and organizational needs assessments, technical assistance and evaluation. Funding sources are grants and contracts from federal, state, and county government agencies as well as private non-for-profit agencies.

The academy is located at 6505 Alvarado Road, Suite 107, and can be reached at 619-594-3546 or at http://pcwta.sdsu.edu.

## Institute for Public Health

Suzanne P. Lindsay, Executive Director
Administered through the Graduate School of Public Health, the mission of the institute is to serve as a vehicle for the development and support of functional linkages between the SDSU Graduate 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 universitybased 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/.

## Sharp Healthcare Professional Education and Research Institute Marilyn Newhoff, Director

The institute serves to create a focus for excellence in healthcare education and research, advancing theory and practice in health services. Researchers conduct relevant healthcare research; clinical internships are provided, including in the Sharp Healthcare environment, to talented and promising future healthcare employees; guest lectures, seminars, and workshops are sponsored on emerging healthcare topics; and doctoral projects addressing critical issues in Sharp Healthcare and beyond foster mentoring and advanced applied clinical practice.

## Social Policy Institute <br> Loring Jones, Director

Administered through the School of Social Work, the mission of the institute is to assist local, state and regional 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 prevention programs that reduce adverse outcomes for vulnerable individuals, families, and communities. To this end, we assist with community needs assessments, as well as program development and evaluation. The Social Policy Institute has prepared a training manual and CD-ROM for home visitors and case managers working with vulnerable families and has recently 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.


## College of Professional Studies and Fine Arts

## Administration

Dean: Joyce M. Gattas
Associate Dean: Donna M. Conaty
Assistant Dean for Student Affairs: Randi E. McKenzie
Director of Community Engagement and
Innovative Programs: Randy S. Reinholz
Director of Development:
Director of International Programs: Giancarlo Taylor
College Communications Officer: Christianne Penunuri

## 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 programs which 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 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), Hospitality and Tourism 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), Television, Film and New Media Production (M.A.), 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.), Music (B.A., B.M.), Public Administration (B.A.), Recreation Administration (B.S.), Television, Film and New Media Production (B.S.), Theatre Arts (B.A.).


#### Abstract

Minors Aerospace 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, Television, Film and New Media, Theatre Arts.


## Military Curricula

Aerospace Studies, Military Science, Naval Science.

## Certificate Programs

Artist Diploma, Communication, Entertainment Management, Health Communication, International Media, Performance, Public Administration (available at Imperial Valley Campus only).

## Arts Alive SDSU

## Danielle J. Bedau, Chair

Arts Alive SDSU is a campus-wide arts visibility initiative that provides opportunities for students, faculty, and staff to engage in transformational arts interactions as part of an arts-rich, robust educational community on the campus of San Diego State University. Arts Alive SDSU's primary goals are to broaden awareness of arts events and programming, increase attendance at arts events, expand academically informed art-making opportunities, and integrate arts events and arts practices into curriculum. Pop-up performance and gallery events take place at the Farmers' Market, Art Under the Dome at the library, and the Conrad Prebys Aztec Student Union, along with a robust social media campaign, provide promotion of signature and supported events in the schools of Art and Design, Music and Dance, and Theatre, Television, and Film. Arts Alive SDSU develops and expands interdisciplinary curriculum opportunities by serving as a nexus for faculty interested in cross-disciplinary dialogue and collaboration. Visit the website at http://artsalive.sdsu.edu for additional information.

## Research Centers and Institutes

## The J. Willard and Alice S. Marriott Foundation Student Center for Professional Development Brian P. Blake, 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 http://htm.sdsu.edu/web/index.php/ students/center_professional_development, for more details.

## 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-for-profit 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 in Professional Studies and Fine Arts, Room 436, or at 619-594-4964, or visit the website at http://htm.sdsu.edu/ web/index.php/centers.

## 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 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.

## 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.

## Institute of Public and Urban Affairs Mounah Abdel-Samad, Director

The Institute of Public and Urban Affairs is located in the School of Public Affairs. The institute was established to conduct research in community and governmental affairs and to sponsor conferences, colloquia and symposia related to issues in public administration and affairs including urban planning, management, and criminal justice administration. The institute also publishes occasional working papers and research monographs. Selected students and faculty of San Diego State University staff the institute. An integral part of the institute is the Public Administration Center which contains a specialized and growing collection of research materials emphasizing issues in public affairs particular to San Diego and California. Visit the website at http://ipua.sdsu.edu/ for additional information.

## Institute for Meetings and Events Stephanie Dathe, Director

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. For additional information, contact Stephanie Dathe at sdathe@mail.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 http://csr.sdsu.edu/.

## 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 http://arweb.sdsu.edu/ es/admissions/majors/tvfilmnewmediaprod.htm

## Center for the Study of Media and Performance (CSMP)

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 center invites faculty from across SDSU to participate in lectures, meetings, symposia, performances, screenings, and other presentations that explore the discourses linked by the keywords "media" and "performance." The center aims to engage leading thinkers in these and related fields in a national dialogue. The center welcomes participation from SDSU faculty, students, and affiliates, as well as the greater San Diego community.

The objective of the center is to make a significant intervention into research practices in the arts. Art is a mode of critical inquiry, and proceeding from this premise, the center seeks to bridge the divide separating theory and practice in the academy, as well as in the studio. Some of the center's projects will take the form of practice-based research that uses media forms and/or live performance to interrogate youth culture, classic literature, and our contemporary world. Aligned with the mission of the College of Professional Studies and Fine Arts and the School of Theatre, Television, and Film, the center brings together artists and scholars to engage in new ideas about critical analysis, devising, presenting, and other modes of research in the arts.

## 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.

## 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.

## 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.

# College of Sciences 

## Administration

Dean: Stanley R. Maloy

Associate Dean for Graduate and Research Affairs: Radmila Prislin Associate Dean for Academic and Faculty Affairs: Catherine J. Atkins Assistant Dean for Student Affairs: Estralita Martin
Director of Development: Stacy Carota
Director of Resource Management:

## 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), Chemistry, Clinical Psychology, Computational Science, Ecology, Evolutionary Biology, Geophysics, Mathematics and Science Education.

## Master's Degrees

Applied Mathematics (M.S.), Astronomy (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, History of Science and Technology, 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

Biomedical Quality Systems, Biotechnology, Communication Systems, Geographic Information Science, Industrial/Organizational Psychology, Intellectual Property and Regulatory Affairs, International Security and Trade, Mathematics Specialist, Preprofessional Health Preparation, Professional Computational Science, Regulatory Affairs, Residency Training in Radiation Therapy Physics, Single Subject Mathematics, Web and Mobile Applications Development.

## Preprofessional Curricula

Predental, Premedical, Preoptometry, Prepharmacy, Prephysician Assistant, Preveterinary.

## Research Centers and Institutes

## 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.

## Institute for Behavioral and Community Health (IBACH)

Gregory A. Talavera and Guadalupe X. Ayala, Co-Directors
The Institute for Behavioral and Community Health (IBACH) is located at 9245 Skypark Court, Suite 221, San Diego, CA 92123. The institute was founded as The Center for Behavioral Medicine in 1982 for the purpose of promoting research and academic programs relevant to the applications of behavioral science principles to medicine and health care.

The institute has 10 investigators from four different colleges. The interdisciplinary institute encourages participation from all of the university colleges and departments. Active investigators are from the Graduate School of Public Health, the School of Exercise and Nutritional Sciences, and the Departments of Psychology and Sociology. Institute projects involve collaboration between scientists and clinicians from a variety of specialties, as well as a variety of other institutions, many of which emphasize Latino health. Funding for the institute comes from National Institutes of Health, Centers for Disease Control, the State of California, and private foundations.

The institute provides important research experiences to diverse students who intend to pursue related careers and offers opportunities for project staff and graduate students to participate in community interventions. Visit http://www.ibachsd. org to learn more.

## Center for Behavioral Teratology (CBT) Edward P. Riley, Director <br> 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, TobaccoRelated Disease Research Program, and the State of California.

## 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 Graduate 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, Eugene A. Olevsky, and Paul J. Paolini, 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 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.sci.sdsu.edu/csrc.

## 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 intercollege 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

## Center for Energy Studies (CES)

 Alan R. Sweedler, DirectorThe 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.

## Field Stations Program <br> 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 2,513acre 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.


#### Abstract

\section*{Heart Institute <br> Christopher C. Glembotski, Director}

The Heart Institute is sponsored by the College of Sciences and the College of Health and Human Services. 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.


## 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.

## Center for Research in Mathematics and Science Education (CRMSE) Ricardo B. Nemirovsky, 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 currently has members from the faculties of biology, dual language and English learner education, mathematics and statistics, mechanical engineering, 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 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 236, San Diego, CA 92120-5013. For more information, contact 619-594-4696. The center may also be reached via campus Mail Code 1862 and at http://crmse.sdsu.edu.

## Center for Microbial Sciences Anca M. Segall, Director <br> 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/.

## Molecular Biology Institute <br> 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 Graduate 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, grant-funded 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 Indonesia, China, Mexico, Africa, Australia, Canada, and Central Asia. 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, including 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.


# College of Extended Studies 

## 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 overal 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

The College of Extended Studies at San Diego State University 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 life style and expectations of lifelong learners. Under the direction of the dean of the college, programs are developed and carried out within the divisions of Extension, Professional Development, American Language Institute, and Administrative Services. 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 nonmatriculated 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 College of Extended Studies fees for these units. The course repeat policy applies to courses repeated through Open University. Consult the College of Extended Studies 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. Nonmatriculated foreign students (nonresidents from non-English-speaking countries) with a score of less than 550 on the English language test or its equivalent ( $80 \mathrm{iBT}, 6.5$ IELTS).
2. Foreign students with $\mathrm{I}-20$ visas from another university.
3. SDSU matriculated students.
4. 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 regula semester on a space available basis with the approval of the course instructor. 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 Transfer Credit).

Special Session programs are offered through the College of Extended Studies. A matriculated student who is not in a special sessions program may only take courses through Special Session
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 session fees and egular 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 which may be used toward SDSU bachelor's degree requirements is 24 units. Courses offered through the College of Extended Studies 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 the College of Extended Studies 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 ESL programs in the US. The ALI is able oo 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:

## Intensive English for Communication (IEC)

IEC is a four or more week course 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. http://www.ali.sdsu.edu/iec.

## Business English and Business for Global Practices Certificate

These programs benefit students interested in learning more about American business practices while also improving their English communication skills. Students may specialize in Business for Globa Practices (BGP), an advanced certificate program for professionals. Both programs have flexible start dates and do not require an English anguage examination for admission. http://www.ali.sdsu.edu/be or http://www.ali.sdsu.edu/bgp.

## English for Academic Purposes (EAP)

EAP is a full semester or summer term course for students planning to enter San Diego State University or other colleges or universities a the undergraduate level. Classes are offered in academic reading, writing, grammar, listening, notetaking, and speaking. Coursework s available in test preparation, pronunciation, and vocabulary. Students may also choose from over 30 elective course offerings http://www.ali.sdsu.edu/eap

## Pre-MBA and Pre-Master's

This program prepares students for graduate degrees, including MS, MA, and MBA. Coursework includes GRE and GMAT test preparation. http://www.ali.sdsu.edu/premba

## Semester at SDSU

Students who meet SDSU's English proficiency requirement may register for 9 to 12 units through ALI's Semester at SDSU program http://www.ali.sdsu.edu/semester

## Teacher Training Programs

Teacher training programs include the TESL/TEFL Certificate for those with little or no previous English language teaching experience who would like to teach English abroad, and the TEFL Seminar for teachers with previous English language teaching experience. http://www.ali.sdsu.edu/teachertraining.

## Customized Group Programs

The ALI can offer customized 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 and to apply, please see the ALI website at http://www.ali.sdsu.edu or call 619-594-5907.

## Osher Lifelong Learning Institute

The Osher Lifelong Learning Institute offers instructor-led university inspired courses for people age 50 and better who are interested in meaningful intellectual and social engagement. Classes are held on the SDSU campus, with opportunities to attend special events and edventures (educational excursions) at various locations. Course topics include art, culture, current events, history, literature, music, religion, science, and more. Courses are intellectually stimulating without the pressure of grades, tests, or papers. For more information call 619-594-2863, e-mail osher@mail.sdsu.edu or visit the website at: http://www.neverstoplearning.net/osher.

## Study Abroad

The college offers matriculated SDSU students and the general public the opportunity to study abroad while earning SDSU credit.

For more information, visit http://www.ces.sdsu.edu/studyabroad.

## Certificate Programs

A complete listing of certificate programs is in the Curricula Summary section of this catalog.

## College of Extended Studies 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.

College of Extended Studies courses are offered each semester in a number of areas including education, business administration, public affairs, and the arts and sciences. Many courses and programs are developed in cooperation with off-campus organizations and groups who have identified specific needs. Many extension courses are now offered online. These courses are listed on the Extended Studies website at http://www.neverstoplearning.net and in a special Extended Studies Catalog published three times a year. 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, human resources, hospitality, lean enterprise, 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.

## Professional Development Online (PDOL)

Meeting the needs of our students, the College of Extended Studies has developed a wide offering of professional development courses that can be completed on the Internet. Programs are available in key business areas such as leadership, finance, project management, and customer service. These online programs typically consist of five to ten courses, and can be completed at the student's own pace.

## Tailored On-Site Training

The College of Extended Studies 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: Gale S. Etschmaier
Associate Dean: Patrick McCarthy
Director of Access Services and Human Resources: Sara Baird
Director of Information Technologies and
Digital Initiatives: Mark Figueroa
Director of Development: Alan Andrade

## 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 fivestory Love Library and the newer 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 midnight to 7:00 a.m. The 24/7 study area is open only to current SDSU students, staff, and faculty whenever the main library is closed. Please check hours by visiting the website or by calling 619-594-6721.

Registering for a library PIN 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. The library has a comprehensive teaching program, which includes course-related instruction and tours. Library faculty serve as subject specialists providing in-depth research support for each major on campus.

Tutoring programs are hosted in the library for mathematics, statistics, and the Writing Center.

The Wells Fargo Financial Laboratory is hosted in the library with 12 Bloomberg terminals for real-time financial literacy education. The laboratory is staffed by the College of Business Administration and is open to all interested students.

The Student Computing Center provides computer accounts to all students and hosts webpages for academic use. The center operates an extensive computer laboratory with over 400 computers. Resources include a help desk, access to Microsoft computer applications, and wireless networking throughout the library.

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.

## Holdings

The library's holdings exceed 2.2 million titles; over 500,000 of these are electronic books. The library's robust collection includes electronic access to journals, microforms, maps, sound recordings, and archival papers. The library is a depository for United States and California government publications and holds selected United Nations publications


Request for books not available at SDSU can be made online or at an information desk. Partnerships with 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, Media Center, Current Periodicals and Microform Center, 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 security and care in handling. Ephemera, such as art prints, etchings, memorabilia, oral histories, photographs, and postcards are kept in this area. Significant holdings include an extensive science fiction collection, the Edward Gorey personal library, and historical archives of the university. Noteworthy regional history collections include items from the civil rights era and the Chicano movement.

Students and researchers are encouraged to make use of these tems in the adjoining Reading Room.

# Imperial Valley Campus 

TELEPHONE: 760-768-5500

## WEBSITE: http://www.ivcampus.sdsu.edu

## Administration

Dean: David E. Pearson
Associate Dean for Academic Affairs: Michael J. Sabath Assistant Dean for Student Affairs: Miguel Rahiotis
Director of Business and Financial Services: Irma Martinez
Director of Development and Community Relations: Valorie A. Ashley Director of Student Affairs: Miriam Castañon

## Faculty

Emeritus: Ayala, Ballesteros, Coates, Dunn, Fatemi, Garrison, Hill, Livingston, Medeiros, Merino, Murphy, Polich, Roeder, Ryan, Varela-Ibarra
Professors: Castañeda, Champion, Neumann, Ramirez-Pimienta, Shumaker, Verzi
Associate Professors: Altamirano, Boime, Cordero, Herrera, Ponce, Sabath, Stampfl
Associate Librarian: Payne
Assistant Professors: Abarbanell, Braun
Lecturers: Fuentes, Hoyt, Kofford

## General Information

The Imperial Valley Campus 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, the Imperial Valley Campus offers first and second year undergraduate education through the Imperial Valley University Partnership, an innovative collaboration between SDSU-IV, Imperial Valley College, and the Imperial County Office of Education, to students planning to major in criminal justice, 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). Imperial Valley Campus 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. The Imperial Valley Campus 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 Campus.

## 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

Master of Arts in Education
Concentration in Educational Leadership
Concentration in Elementary Curriculum and Instruction
Concentration in Secondary Curriculum and Instruction
Master of Public Administration (in cooperation with the
San Diego campus)
Master of Social Work (in cooperation with the San Diego campus)

## Bachelor's Degrees

Criminal Justice (B.S.)
English (B.A.)
History (B.A.)
International Business: Latin America and North America
emphases (B.A.) (Currently not admitting new students)
Latin American Studies (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
Political Science
Psychology
Public Administration
Spanish

## Certificate Programs

Business Administration (Currently not admitting new students)
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, Moderate/Severe.

For further information on any of these degrees, see the SDSU Imperial Valley Campus Bulletin.

## Imperial Valley University Partnership

Imperial Valley University Partnership (Freshman Program) 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 offers majors in criminal justice, history, liberal studies (mathematics, science, and literacy), psychology, 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 Imperial Valley University Partnership accepts admission applications for fall from October 1 to November 30 of the previous year. For additional information, visit http://www.ivup.org.

## Exchange Programs and Study Abroad

Graduate and undergraduate students at the SDSU-Imperial Valley Campus 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

## Center for Individual and Professional Skills Development Suzanna Fuentes, Director

The Center for Individual and Professional Skills Development at San Diego State University-Imperial Valley Campus offers community programs to the Imperial and Mexicali valleys. The center offers English as a Second Language (ESL) courses in the local community and a teacher training program in Mexico. Additionally, the Center for Individual and Professional Skills Development presents annual conferences including the Bi-national Conference on Education and the Bi-national Youth Leadership Conference.

## USDA-HSI and SDSU-Imperial Valley Campus 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 Administration Building at SDSU Imperial Valley Campus.

## 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 on the Imperial Valley Campus. 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.

## Transfer Center

The Transfer Center provides support services to identified and potential transfer students from accredited institutions. Information is provided by a professional counselor about programs and services available at San Diego State University, Imperial Valley Campus. The transfer center works with all students, and has among its goals to increase the number of underrepresented students in higher education. Underrepresented students are minorities, disabled, low income, and others not proportionately represented among the transfer population. For more information, call 760-768-5506, visit the office located in Student Affairs, or go to http://www.ivcampus.sdsu.edu/transfer.

## Admission and Registration

To apply for admission to the Imperial Valley Campus, students complete the CSUMentor application online athttp://www.csumentor.edu 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

The Imperial Valley Campus holds its own commencement exercises each spring, in the Rollie Carrillo Quad, prior to commencement exercises on the San Diego campus.

## Imperial Valley Campus Scholarships

The Imperial Valley Campus students were awarded \$89,448.00 in scholarships for the 2013-2014 academic year. Information and applications for scholarships are available from the Financial Aid Office. Following is a list of scholarships established at Imperial Valley Campus:

## Scholarships with endowments:

- Anheuser-Busch Companies, • Alicia Mendoza Inc.
- David Ballesteros
- William and Susan Brandt
- Enrique (Kiki) Camarena
- Alejandro and Florencia Nogales
- Centinela Solar Energy Project
- Margarita De Necochea
- Francis and Edna Rae Frye
- Jack Hart Family
- Good Sport Howie
- Herschel Hudson
- Nancy A. Marlin
- Sally McMahon/Doves


## Imperial Valley Campus - Calexico Campus Map

SDSU IVC Campus - Calexico 720 Heber Avenue Calexico, CA 92231

760-768-5500


## Imperial Valley Campus - Brawley Campus Map

SDSU IVC Campus - Brawley
560 East Highway 78
Brawley, CA 92227
760-351-0806


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## PART FOUR

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 2015, May 2016, or in the 2016 summer term may adopt this catalog by so indicating on their application for graduation.

## I. Freshmen Competency Requirements: Mathematics and Writing <br> All students are required to demonstrate competency in basic

 mathematics and standard written English. Incoming students who are not exempt from the CSU Entry Level Mathematics examination (ELM) and/or the English Placement Test (EPT) because of national test scores or college level courses (see explanation of exemptions) must take these tests by the May test date or their admission to SDSU will be cancelled. Those who fail one or both of these examinations are REQUIRED to be enrolled in appropriate sections of General Mathematics and/or Rhetoric and Writing Studies courses in the FIRST semester of enrollment. Students who do not successfully complete their remediation requirements within one year of their initial enrollment will be administratively disqualified.Competency requirements are required preparation for a number of specific courses identified in the Class Schedule. Test dates and times are listed in the Testing Requirements section of the current Class Schedule. No student may graduate until all competency requirements are satisfied

## MATHEMATICS TESTING REQUIREMENTS: FRESHMEN

Demonstration of mathematics competency is satisfied in one of he 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 or an ELM score of 550 if taken before February 2002.
2. Score of 550 on the Scholastic Aptitude Test or Scholastic Assessment Test (SAT or SAT Subject Tests level 1 or level 2) in mathematics.
3. Score of 23 on the American College Test (ACT) mathematics section if taken after October 1989
4. Score of "Ready for CSU College-Level Mathematics Courses" on the Early Assessment Program (EAP), augmented mathematics, taken in the 11th grade as part of the California Standards Test or Algebra II.
5. Score of "Ready for CSU College-Level Mathematics Courses Conditional" on the Early Assessment Program (EAP), augmented mathematics, taken in the 11th grade as part of the California Standards Test or Algebra II PLUS successful completion of a CSU-approved mathematics or mathematics-related course or activity taken before you enroll at a CSU campus
6. Score of 3 on the College Board Scholastic Advanced Placement (AP) Calculus AB or Calculus BC examination or the statistics examination
7. Score of 550 on the College Board Mathematics Achievement Test, Level I or IC or II or IIC
8. Score of 550 on the College Board SAT II Mathematics Test, Level I or IC or II or IIC
*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.

OR
B. Earn a C or better grade in an approved transferable college mathematics course that satisfies CSU General Education in Mathematics/Quantitative Reasoning

## OR

C. Complete BOTH a. and b. (below)
a. Attempt but fail (with a score below 50 if taken after February 2002 and score below 550 if taken before February 2002) the CSU Entry Level Mathematics (ELM) test.

## AND

b. Earn Credit (Cr) in General Mathematics Studies 91 at SDSU.

Credit earned in General Mathematics Studies courses numbered below 100 are not applicable to the baccalaureate degree

## Mathematics and Chemistry Departmental Placement Examinations

Prior to enrollment in certain mathematics and chemistry courses, students may be required to pass a Mathematics or Chemistry Departmental Placement Examination as part of the stated prerequisites. These examinations assess mathematical or chemistry preparation beyond the elementary level. The Precalculus Proficiency Assessment tests knowledge of algebra and trigonometry as needed in Mathematics 150, Calculus I. 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

Demonstration of writing competency 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).
2. Score of 500 on the Scholastic Aptitude Test or Scholastic Assessment Test (SAT) critical reading section if taken 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 "Exempt" or "Ready for College-Level English Courses" category on the CSU Early Assessment Program (EAP) taken in the 11th grade as part of the English Language Arts California Standards Test.
5. Score of 3 on the College Board Scholastic Advanced Placement (AP) Language and Composition or Literature and Composition test.
6. Score of 600 on the College Board Achievement Test in English Composition with Essay.
7. Score of 680 or above on the College Board SAT Writing section.
8. A score of 4-7 on the Higher Level English A1 International Baccalaureate examination.

* 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.


## OR

B. Pass with a C or better an approved transferable college composition course that satisfies CSU General Education in Composition or Critical Thinking.

## OR

C. Complete BOTH 1. and 2 below

1. Attempt but fail (with a score below 147 total) the CSU English Placement Test (EPT)
AND
2. Earn credit ( Cr ) in one of the following courses: Linguistics 94; Rhetoric and Writing Studies 92, 94.
Credit earned in Linguistics and Rhetoric and Writing Studies courses numbered below 100 are not applicable to the baccalaureate degree.

## 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 evaluate writing competency.
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 stop out of the university one semester and maintain continuing student status. If the examination is completed during the stop out term, the student may re-enroll the following semester. Students who have not taken the examination by the end of the stop out term will be required to reapply for admission to SDSU and meet the admission requirements in effect at the time they reapply.
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 or 9 are required to satisfy the Graduation Writing Assessment Requirement by completing an approved upper division writing course with a grade of C or higher. SEE LIST BELOW.

Students who earn a score of 7 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 higher before enrolling in one of the required approved upper division writing courses. The SDSU registration system will require students who earn a 7 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
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
Journalism and Media Studies 310W
Linguistics 305W
Management Information Systems 396W
Recreation and Tourism Management 396W
Religious Studies 396W
Rhetoric and Writing Studies 305W
Rhetoric and Writing Studies 500W
Rhetoric and Writing Studies 503W
Rhetoric and Writing Studies 508W

## 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 or in General Education, except for General Education, section III, American Institutions. A three-unit General Education course required for your major but not in your major department may be used in section IV, Explorations of Human Experience only if your major requires at least 27 units for the B.A. degree or at least 39 units for the B.S. degree. 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 are not permitted to add another major since it would violate the program's guarantee of graduation within 60 semester units.

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. 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 Cr/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 (three of the six units needed for American Institutions can also be applied to General Education):
Africana Studies 170A and 170B Political Science 102 and 305
American Indian Studies $140 \quad$ Political Science 102 and 321 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 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 or International Baccalaureate credit in History of the Americas.
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, German language, Italian language and culture, Japanese language and culture, Spanish language or Spanish literature; or passing with a score of 5 in Vergil.
6. Passing with a score of 4 to 7 on the higher level A2 or B examination for International Baccalaureate credit in Arabic, French, German, Italian, Korean, Russian, or Spanish.

Students who are majoring in Art History, Asian Studies, Comparative International Studies, European Studies, Humanities, International Economics, International Security and Conflict Resolution, Jewish Studies, Latin American Studies, and Linguistics 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, 201, or 202
Chicana and Chicano Studies 101, 102, and 201 (Náhuatl)
Chinese 101, 102, and 201
Classics 101G, 202G, and 303G (Greek)
Classics 101L, 202L, and 303L (Latin)
Filipino 101, 102, and 201
French 100A, 100B, and 200 or 201 or 210 or 221
German 100A, 100B, 202 or 205A or 205B
Hebrew 101, 102 and 200, and 201
Italian 100A, 100B, and 201 or 211 or 212
Japanese 111, 112, and 211
Korean 101, 102, and 201
Persian 101, 102, and 201 or 202
Portuguese 101, 201, and 301
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. Required competency must be evaluated in a language competency evaluation administered by the head of the vocal area in the School of Music and Dance.
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
4. Bachelor of Science degree in Engineering ............................ 129-137
5. Bachelor of Fine Arts degree in Dance.................................... 132
6. Bachelor of Music degree ...................................................... 132

The 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:

1. Bachelor of Arts degree in Applied Arts and Sciences ....... 40
2. Bachelor of Arts degree in Liberal Arts and Sciences ........ 40
3. Bachelor of Science degree in Applied Arts and Sciences.... 45
4. Bachelor of Fine Arts degree in Applied Arts and Sciences ... 48
5. Bachelor of Music degree ..............................................51-63

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 courses .... 70
2. From credit by examination (excluding AP credit) ................. 30
3. From a total of all Extension, Open University, and correspondence courses (includes courses taken 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 $(\mathrm{Cr})$................................................... 9
5. From topics courses numbered $296, ~ 496,596 . . . . . . . . . . . . ~$
5. From topics courses numbered 296, 496, $596 \ldots \ldots . . . . . . . . . . . . . . . . . . . . . ~$
6
6. From General Studies courses numbered 200 and 400 ...... 6
7. From courses numbered below 100, and courses numbered 397 ............................................................... 0
8. From Special Study courses numbered 299, 499, 599 ......... 9
(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
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) ...... 14
12. From Music 170-189, 370-389, 570-589 (for music major for B.M. degree in Performance and Jazz Studies) ........ 18

[^1]
## 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 theAmerican Chemical Society...49
c. For students majoring in Dance (Bachelor of Arts)... ..... 51
d. For students majoring in English (courses in ComparativeLiterature, English, Rhetoric and Writing Studies) ...... 54
e. For students majoring in French ..... 49
f. For students majoring in Geography with an emphasis inHuman Geography and Global Studies or the emphasisin Methods of Geographic Analysis.............................. 51
g. For students majoring in Psychology .51
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 number of units in upper division dance courses acceptable toward 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 General Education courses.
(NOTE: Courses taken in Open University prior to spring 1998, for extension credit, and units earned through credit-byexamination 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 higher, 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 four sections: I, Communication and Critical Thinking; II, Foundations of Learning; III, American Institutions; and IV, Explorations of Human Experience. In order to acquire the skills required for advanced coursework within and across disciplines, student should complete the four 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 real-world 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 demand-apply 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, and Humanities and Fine Arts. 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 five categories: 1. Literature, 2. Art, Classics, Dance, Drama, Humanities, and Music, 3. History, 4. Philosophy and Religious Studies, and 5. Foreign Language. 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.

## 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 A. NATURAL SCIENCES 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

The Social and Behavioral Sciences focus on human behavior, cognition, and organization from anthropological, economic, geographic, 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

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.


## GENERAL EDUCATION

## Requirements and Limitations

You must complete all requirements in sections I, II, III, and 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. No more than $\mathbf{1 2}$ units from one department can be used in General Education.
2. No more than $\mathbf{7}$ units from one department can be used in sections II and IV combined (Foundations of Learning and Explorations of Human Experience), nor more than 10 units from one department in sections II, III, and IV combined (Foundations of Learning, American Institutions, and Explorations of Human Experience)
3. Upper division courses in your major department cannot be used in section IV, Explorations of Human Experience. Courses in a student's major (collaborative/cross-listed, "Same course as") may not be used in section IV, Explorations of Human Experience.
4. A three-unit General Education course required for your major but not in your major department may be used in section IV, Explorations of Human Experience only if your major requires at least 27 units for the B.A. degree or at least 39 units for the B.S. degree.
5. Explorations of Human Experience courses shall not be taken sooner than the semester in which you pass 60 units.
6. Credit/No Credit grades cannot be used in section I, Communication and Critical Thinking or section II.A.4., Mathematics/Quantitative Reasoning.
7. 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, II, and 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, II, III, and 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. Composition, I.3. Intermediate Composition and Critical Thinking, and II.4. Mathematics/Quantitative Reasoning. Freshmen whose scores on the Entry Level Mathematics (ELM) and English Placement Test (EPT) examinations are below passing must enroll in the appropriate remedial course in the first semester. 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.

Students who do not successfully complete their remediation requirements within one year of their initial enrollment will be administratively disqualified.

## Specialized General Education Patterns

Engineering, Liberal Studies, Nursing, and single subject credential 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)

You may not use Credit/No Credit grades in this section. Complete one course from each of the following three sections.

1. Oral Communication. Complete one course.

Africana Studies 140. Oral Communication (3)
Chicana and Chicano Studies 111A. Oral Communication (3)
Communication 103. Oral Communication (3)

## 2. Composition

Africana Studies 120. Composition (3)
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 100. English Composition for International Students (3)
Rhetoric and Writing Studies 100. Rhetoric of Written Argument (3) [Same course as English 100.]
Rhetoric and Writing Studies 101. Rhetoric of Written Argument (3)
3. Intermediate Composition and Critical Thinking

Africana Studies 200. Intermediate Expository Writing and Research Fundamentals (3)
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 110. Critical Thinking and Composition (3)
Rhetoric and Writing Studies 200. Rhetoric of Written Arguments in Context (3) [Same course as English 200.]

## II. FOUNDATIONS OF LEARNING (28 units)

No more than 7 units total may be taken in any one department in Foundations of Learning and Explorations of Human Experience combined, and no more than 10 units may be taken in any one department in Foundations of Learning, American Institutions, and Explorations of Human Experience combined.
A. Natural Sciences 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

Astronomy 101. Principles of Astronomy (3)
Astronomy 201. Astronomy for Science Majors (3)
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.]
Environmental Science 100. Environmental Sciences (3) [Same course as Sustainability 100]

+ Geography 101. Earth's Physical Environment (3) [Cannot be used in combination with Anthropology 101.]
+ Geography 103. Weather and Climate (3) [Cannot be used in combination with Anthropology 101.]

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

+ Anthropology 101. Human Biocultural Origins (3) [Cannot be used in combination with Geography 101 or 103.]
Biology 100. General Biology (3)
Biology 101. World of Animals (3)
+ Only one of these three courses may be taken for General Education credit.

3. Laboratory

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 Laboratory (1)
Geological Sciences 101. Dynamics of the Earth Laboratory (1)
Oceanography 100. The Ocean Planet (4)
4. Mathematics/Quantitative Reasoning

You may not use Credit/No Credit grades in this section.
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)
Geography 104. Geographic Information Science and Spatial Reasoning (3)
Mathematics 105. College Algebra (3)
Mathematics 118. Topics in Mathematics (3)
Mathematics 120. Calculus for Business Analysis (3)
Mathematics 122. Calculus for the Life Sciences II (3)
Mathematics 124. Calculus for the Life Sciences (4)
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)
Mathematics 245. Discrete Mathematics (3)
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)
Sociology 201. Elementary Social Statistics (3)
Statistics 119. Elementary Statistics for Business (3)
Statistics 250. Statistical Principles and Practices (3)

## Special Provision for Majors in the Sciences

 and Related FieldsSome 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 above.
B. Social and Behavioral Sciences. Complete two courses taken from different departments (6 units).

Africana Studies 101. Introduction to Africana Studies (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)
Child and Family Development 135. Principles of Family Development (3)
Child and Family Development 170. Child and Adolescent Development from a Cultural Perspective (3) [Same course as Teacher Education 170; for Liberal Studies majors only.]

Communication 245. Interpersonal Communication (3)
Economics 101. Principles of Economics (3)
Economics 102. Principles of Economics (3)
General Studies 280. Introduction to Civic Engagement (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)
Journalism and Media Studies 200. Introduction to
Contemporary Media (3)
Journalism and Media Studies 210. Social Media in the Digital Age (3)
Latin American Studies 101. Introduction to Latin American Studies (3)
Linguistics 101. Introduction to Language (3)
Political Science 103. Introduction to Comparative Politics (3)
Political Science 104. Global Politics (3)
Professional Studies and Fine Arts 100. Sustainable Development (3)
Psychology 101. Introductory Psychology (3)
Science 250. Informal Learning and Instruction of
Mathematics and Science (3)
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 170. Child and Adolescent Development from a Cultural Perspective (3) [Same course as Child and Family Development 170; for Liberal Studies majors only.]
Women's Studies 101. Women: Self, Identity and Society (3)
C. Humanities. Complete a course in each of four of the following five areas (12 units).

## 1. Literature

Africana Studies 260. Africana Literary Study (3)
Comparative Literature 270A. World Literature (3)
Comparative Literature 270B. World Literature (3)
English 220. Introduction to Literature (3)
2. Art, Classics, Dance, Drama, Humanities, and Music

American Indian Studies 110. American Indian Heritage (3)
Art 157. Introduction to Art (3)
Art 258. Introduction to Art History I (3)
Art 259. Introduction to Art History II (3)
Asian Studies 101. Asian Thought and Cultures (3)
Asian Studies 150. Understanding the Chinese World (3)
Chicana and Chicano Studies 100. Chicana and Chicano Heritage (3)
Classics 140. Introduction to Classics (3)
Construction Engineering 101. Construction and Culture (3)
Dance 181. Introduction to Dance (3)
European Studies 101. Introduction to European Studies (3)
German 150. Introduction to German Studies (3)
Humanities 101. Introduction to Humanities (3)
Humanities 130. The Jewish Heritage (3) [Same course as Jewish Studies 130]
Humanities 140. World Mythology (3)
Jewish Studies 130. The Jewish Heritage (3) [Same course as Humanities 130]
Linguistics 243. Invented Languages - Klingon and Beyond! (3)
Music 151. Introduction to Music (3)
Rhetoric and Writing Studies 250. Rhetoric in Everyday Life (3)
Russian 110. Slavic Legends and Tales (3)
Russian 250. Russian Culture in a Digital World (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)
Women's Studies 102. Women: Images and Ideas (3)

## 3. History

History 100. World History (3)
History 101. World History (3)
History 105. Western Civilization to the Seventeenth Century (3)
History 106. Western Civilization Since the Sixteenth Century (3)
4. Philosophy and Religious Studies

Africana Studies 240. Africana Intellectual Thought (3)
Philosophy 101. Introduction to Philosophy: Ethics (3)
Philosophy 102. Introduction to Philosophy: Knowledge and Reality (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)

## 5. Foreign Language

Arabic 101. Elementary Arabic I (4)
Arabic 102. Elementary Arabic II (4)
Arabic 201. Intermediate Arabic I (4)
Arabic 202. Intermediate Arabic II (4)
Chicana and Chicano Studies 101. Elementary Náhuatl I (4)
Chicana and Chicano Studies 102. Elementary Náhuatl II (4)
Chicana and Chicano Studies 201. Intermediate Náhuatl I (4)
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 I (5)
Classics 120. English Words from Latin and Greek (3)
Classics 202G. Ancient Greek II (5)
Classics 202L. Latin II (5)
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 220. Grammar of Spoken French (3)
French 221. Writing French (3)
German 100A. First Course in German (5)
German 100B. Second Course in German (5)
German 202. Readings in German (3)
German 205A. Third Course in German (4)
German 205B. Fourth Course in German (4)
Hebrew 101. Elementary Hebrew I (4)
Hebrew 102. Elementary Hebrew II (4)
Hebrew 201. Intermediate Hebrew (4)
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 (4)
Japanese 111. Elementary Japanese I (5)
Japanese 112. Elementary Japanese II (5)
Japanese 211. Intermediate Japanese I (5)
Japanese 212. Intermediate Japanese II (5)
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)
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)
Portuguese 101. Elementary/Intensive Portuguese I (5)
Portuguese 201. Elementary/Intensive Portuguese II (5)
Russian 100A. Beginning Russian 1 (5)
Russian 100B. Beginning Russian 2 (5)
Russian 200A. Intermediate Russian 1 (5)
Russian 200B. Intermediate Russian 2 (5)
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 281. Intermediate Spanish for Heritage Language Learners I (3)

Spanish 282. Intermediate Spanish for Heritage Language Learners II (3)
Speech, Language, and Hearing Sciences 101. American Sign Language I (4)

## III. AMERICAN INSTITUTIONS (3 units)

Three units of the six units of coursework which meet the American Institutions graduation requirement may be used in General Education, excluding courses numbered 500 and above. Refer to General Education section IV, Explorations of Human Experience for exceptions. Upper division courses in the major department may be used to satisfy General Education section III, American Institutions.

## IV. EXPLORATIONS OF HUMAN EXPERIENCE

Courses in this area must not be taken sooner than the semester in which you achieve upper division standing ( 60 units passed). Upper division courses in the major department may not be used to satisfy General Education section IV, Explorations of Human Experience. Courses in a student's major (collaborative/ cross-listed, "Same course as") may not be used in section IV, Explorations of Human Experience.

No more than 7 units total may be taken in any one department in Foundations of Learning and Explorations of Human Experience combined, and no more than 10 units may be taken in any one department in Foundations of Learning, American Institutions, and Explorations of Human Experience combined.

Complete one course each in areas A, B, and C (9 units). One course must be a course in cultural diversity, designated by an *. (Majors in the departments of astronomy, biology, chemistry and biochemistry, computer science, engineering, environmental sciences, geological sciences, mathematics and statistics, natural science nursing, and physics may replace the area A course with an additiona course from area B or C or an upper division American Institutions course if American Institutions requirement was not completed with lower division coursework.)
A. Natural Sciences. Complete one course.

Anthropology 355. Exploring Primate Behavior (3)

* Anthropology 360. From the Grave: Modern Forensic Anthropology (3)
* Anthropology 402. Dynamics of Biocultural Diversity (3)

Astronomy 301. Cosmology and Gravitational Collapse (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 324. Life in the Sea (3)
Biology 326. Plants, Medicines, and Drugs (3)
Biology 327. Conservation of Wildlife (3)
Biology 335. The Human Body (3)
Biology 336. Principles of Human Physiology (3)
Biology 342. Emerging Technologies in Human Health Care (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)
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
* 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)

[^2]* Africana Studies 341. Cultural Patterns and African American Identity (3)
* 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)
* American Indian Studies 320. American Indians in Contemporary Society (3)
* 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 348. Historical Archaeology (3)
* Anthropology 350. Cultures Around the Globe (3)
* Anthropology 353. Sustainability and Culture (3) [Same course as Sustainability 353]
Anthropology 410. Language in Culture (3)
* Anthropology 439. Cultural Comparisons Through Film (3)
* Anthropology 440. Mesoamerican Civilization Before the Europeans (3)
* Anthropology 442. Cultures of South America (3)
* 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]
Asian Studies 300. Asia's Global Future (3)
* Asian Studies 310. Contemporary Issues in AsianAmerican Communities (3)
* Asian Studies 320. Asian Environmental Issues (3)
* $\dagger$ Asian Studies 460. Contemporary Issues in FilipinoAmerican Communities (3)
* Chicana and Chicano Studies 301. Political Economy of the Chicano People (3)
* Chicana and Chicano Studies 303. Chicana and Chicano Community Studies (3)
* Chicana and Chicano Studies 320. Chicana and Chicano Lifestyles (3)
* Chicana and Chicano Studies 355. The United StatesMexico International Border (3) [Same course as Latin American Studies 355]
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)

Economics 489. Economics and Population (3)
Education 350. Education in American Society (3)

* Education 484. Valuing Human Diversity (3)

Exercise and Nutritional Sciences 330. Exercise and Wellness Across the Lifespan (3)
General Studies 330. Plagues Through the Ages (3)

* 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)
* Honors College 413. Interdisciplinary Perspectives on Social Problems (3) [Maximum GE credit 3 units]
* International Security and Conflict Resolution 300. Global 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 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 430. Immigration and Border Politics (3) [Same course as Political Science 430]
* Lesbian, Gay, Bisexual, and Transgender Studies 321. Lesbian and Gay Identities in the Modern World (3)
* Linguistics 345. Queer Linguistics (3)

Linguistics 350. Language and Politics (3)
Linguistics 354. Language and Computers (3)
Linguistics 420. Linguistics and English (3)

* Linguistics 460. American Indian Languages (3) [Same course as American Indian Studies 460 and Anthropology 460]
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 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 356. Politics of Europe (3)
* Political Science 359. Government and Politics of Russia and the Commonwealth (3)
* Political Science 361. Governments and Politics of the Developing 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 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 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)
* 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 335. Mass Communication and Popular Culture (3)
Sociology 338. Sociology of Religion (3)
Sociology 350. Population and Contemporary Issues (3)
Sociology 352. Contemporary Social Problems (3)
* Sociology 355. Minority Group Relations (3)
* Cultural diversity course.
$\dagger$ Either Asian Studies 460 (IV.B.) or Asian Studies 422/History 422 (IV.C.) may be taken for General Education credit.

Sociology 410. Social Psychology: Mind, Self, and Society (3)
Sociology 421. American Families (3)
Sociology 430. Social Organization (3)
Sociology 450. Social Change (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 370. Women, Law, and Policy (3)
* Women's Studies 375. Sex, Power, and Politics (3)
* Women's Studies 385. Women's Work: Invisibility and Empowerment (3)
C. Humanities. Complete one course
* Africana Studies 365A. African American Literature to 1900 (3) [Same course as English 365A]
* Africana Studies 365B. African American Literature After 1900 (3) [Same course as English 365B]
* Africana Studies 385. African American Music (3)
*^ Africana Studies 465. Africa in Literature and Film (3) [Same course as French 465]
* Africana Studies 466. Afrofuturism (3)
* Africana Studies 470. Comparative History: Afro-American and African Heritage (3)
* Africana Studies 472. African Enslavement (3)
* 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)
* 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)
Arabic 301. Advanced Arabic I (4)
Arabic 302. Advanced Arabic II (4)
*^Arabic 330. Arabic Culture (3)
* Arabic 350. Advanced Conversational Arabic (4)

Art 357. World Art in Contemporary Life (3)

* Asian Studies 421. Asian History Since 1600 (3) [Same course as History 421]
* $\dagger$ Asian Studies 422. Asian American Experiences (3) [Same course as History 422]
* Asian Studies 451. Modern Asian Literature (3) [Same course as Comparative Literature 451]
* Asian Studies 456. Contemporary Asian Film (3)
* Asian Studies 458. Asian Traditions (3)
* Asian Studies 459. Modern Asian Cultures (3)
* Asian Studies 490. Study Abroad in Asian Studies (3) [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]
* Chicana and Chicano Studies 350A. Chicana and Chicano History (3)
* Chicana and Chicano Studies 350B. Chicana and Chicano History (3)
* Chicana and Chicano Studies 375. US/Mexico Border History (3)
* Chicana 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]
* Chicana and Chicano Studies 400. Mexican Images in Film (3)
[Same course as Latin American Studies 400]
* Chicana and Chicano Studies 450. Chicano and Latino Theatre (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. The Invention of European Literature (3)
Classics 330. The Invention of European Drama (3)
Classics 340. Gods, Gladiators, and Amazons (3)
Classics 350. Classics and Cinema (3)
Comparative Literature 405. The Bible as Literature (3) [Same course as English 405]
* Comparative Literature 440. African Literature (3)
* Comparative Literature 445. Modern Latin American Literature (3)
* Comparative Literature 451. Modern Asian Literature (3) [Same course as Asian Studies 451]
* Comparative Literature 470. Folk Literature (3)
* Dance 382. Dance in World Cultures (3)

English 301. The Psychological Novel (3)
@ English 302. Introducing Shakespeare (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 405. The Bible as Literature (3) [Same course as Comparative Literature 405]
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 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]

[^3]* $\dagger$ History 422. Asian American Experiences (3)
[Same course as Asian Studies 422]
* History 436. Modern Jewish History in Feature Films (3)

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 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 320. German Culture (3)
Humanities 330. Russian Culture (3)
Humanities 340. Italian Culture (3)

* Humanities 350. African Cultures (3)

Humanities 370. American Culture (3)
Humanities 405. Faith and Hope (3)
Humanities 406. Renaissance and Self (3)
Humanities 407. Rationalists and Romantics (3)
Humanities 408. The Modern (3)
Humanities 409. The Future (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 II (3)

* Japanese 332. Narratives of Japanese Popular Culture (3)

Korean 301. Advanced Korean I (3)
Korean 302. Advanced Korean II (3)

* Korean 321. Korean Civilization (3)
* 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. Lesbian and Gay History and Culture (3)
* Music 345. World Music in Contemporary Life (3)

Music 351. Music and Culture (3) [Maximum GE credit 3 units]
Persian 301. Advanced Persian I (4)
Persian 302. Advanced Persian II (4)
Philosophy 305. Classics of Western Philosophy (3)
Philosophy 310. Philosophy and Human Nature (3)

* Philosophy 312. Women and Philosophy (3)

Philosophy 315. Philosophy and Literature (3)
Philosophy 329. Social Ethics (3)
Philosophy 330. Biomedical Ethics (3)
Philosophy 331. Ethics in Health Care (3)
Philosophy 332. Environmental Ethics (3) [Same course as Sustainability 332]
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 348. Morality and Climate Change (3)

* Philosophy 351. Chinese Philosophy (3)
* Philosophy 353. Buddhist Philosophy (3)

Portuguese 301. Intermediate Portuguese Reading and Composition (3)

* Portuguese 307. Brazilian Music and Culture (3) [Same course as Latin American Studies 307]

Portuguese 401. Advanced Portuguese Reading and Composition (3)
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 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. Varieties of Religious Experience (3)
Religious Studies 353. Religion and Psychology (3)

* Religious Studies 354. Religion, Myth, and Storytelling (3)
* Religious Studies 355. Religious Ritual and Practice (3)

Religious Studies 356. Hip Hop and Religion (3)

* Religious Studies 358. Death, Dying, and Afterlife (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 (3)
Religious Studies 380. Atheism, Humanism, and Secularism (3)
Religious Studies 395. New Religions (3)

* Religious Studies 470. American Indian Spirituality and 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 the Nineteenth 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 405A. Survey Course in Spanish Literature (3)
Spanish 405B. Survey Course in Spanish Literature (3)
Spanish 406A. Survey of Spanish American Literature (3)
Spanish 406B. Survey of Spanish American Literature (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 PrimeTime Television (3)
Television, Film and New Media 462. Documentary: History and Theory (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 360. Women's Sexuality and the Body (3)

[^4]
## Application for Graduation

Graduation is not automatic upon the completion of requirements. Students who intend to graduate must take the initiative. When they believe they are eligible, students should apply to graduate using the online or in-person option. To apply online, enrolled students can apply using the SDSU WebPortal at http://www.sdsu.edu/portal, selecting the "Apply to Graduate" menu option, and submitting the application and nonrefundable $\$ 55$ filing fee prior to the deadline. To apply in person, students must type and print the graduation application available on the Apply to Graduate website at http://www. sdsu.edu/applytograduate for the term they anticipate completing all degree requirements. In-person applications must be submitted to Student Account Services, Student Services West, Room 2536, with a nonrefundable $\$ 55$ filing fee by the deadline. Handwritten applications will not be accepted. Application deadlines are published each year in the academic calendar and on the Apply to Graduate website at http://www.sdsu.edu/applytograduate. A nonrefundable application fee of $\$ 55.00$ 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. 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 requirements will have their graduation cancelled and must reapply for graduation during the appropriate filing period. Candidates who wish to change their projected graduation date between May and August may do so by submitting a Graduation Term Transfer Form. Changes between December and May or August graduation dates require a new application. Both term transfer and reapplication require a nonrefundable $\$ 55.00$ fee.

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. After the degree is granted no changes can be made to the undergraduate record.

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.

## PART FIVE

Summary of C uric ula Major and Credential Codes

Nondegree Curric ula Course Information
Course Abbreviations
Courses and Curicula 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 College of Business Administration 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, language, 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, nursing education, nursing leadership in health care systems, and women's health and midwifery), a Doctor of Nursing Practice (DNP), 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 Theatre Arts, the Master of Music, the Master of Public Administration, the Master of Public Health, the Master of Social Work, and the Master of Social Work and Juris Doctor.

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 Nursing Practice, 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 abuse, 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, 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 Nursing Practice
Doctor of Philosophy
Doctor of Physical Therapy

Types of Degrees Offered by Major

| Majors | Applied Arts and Sciences |  | Liberal Arts and Sciences | Graduate Curricula |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | B.A., B.F.A. | B.S. | B.A. | Masters (Arts) | Masters (Sciences) | Au.D., DNP, 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. |
| 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. | B.A. | 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. | - | M.B.A.M. | - | - |
| 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.S | B.A. | - | . | - |
| Clinical psychology | - | - | B.A. | - | - | Ph.D. |
| Communication | B.A. | - | B.A. | M.A. | - | Ph.D. |
| 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. | - | M. | - | - |
| Criminal justice and criminology | - | - | - | - | M.S. | - |
| Dance | B.F.A. | - | B.A. | - | S. | - |
| Ecology | - | - | - | ${ }^{-}$ | - | Ph.D. |
| Economics | - | - | B.A. | M.A. | - | - |
| Education | - | - | - | M.A., M.A.T. | - | Ph.D. |
| Educational leadership | - | - | - | M.A. M.A.T. | - | 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. | - | - | - | - |
| European studies | - | - | B.A. | - | - | - |
| Evolutionary biology | - | - | - | - | - | Ph.D. |
| Exercise physiology | - | - | - | - | M.S. | - |
| Exercise physiology and nutritional science | - | - | - | - | M.S./M.S. | - |
| \# 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. | - |
| Health communication | - | B.S. | - | - | - | - |
| Health science | - | B.S. | - | - | - | - |
| History | - | - | B.A. | M.A. | - | - |
| \# An emphasis within the B.S. in Business | ration. |  |  |  |  |  |

Types of Degrees Offered by Major - continued

| Majors | Applied Arts and Sciences |  | Liberal Arts and Sciences <br> B.A. | Graduate Curricula |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | B.A., B.F.A. | B.S. |  | Masters (Arts) | Masters <br> (Sciences) | Au.D., DNP, DPT, Ed.D., Ph.D. |
| Homeland security | - | - | - | - | M.S. | - |
| Hospitality and tourism management | _ | B.S. | - | - | M.S. | - |
| Humanities | - | - | B.A. | - | - | - |
| \# Information Systems | - | B.S. | - | - | M.S. | - |
| Interdisciplinary research on substance use | - | - | - | - | - | Ph.D. |
| Interdisciplinary studies | - | - | B.A. | M.A. | M.S. | - |
| International business | - | - | B.A. | - | - | - |
| International security and conflict resolution | - | - | B.A. | - | - | - |
| Japanese | - | - | B.A. | - | - | - |
| Journalism | - | - | B.A. | - | - | _ |
| Juris doctor/business administration | - | - | B.A. | M.B.A./J.D. | - | - |
| Juris doctor/social work | - | - | - | - | M.S.W./J.D. | - |
| Kinesiology | - | B.S. | - | - | M.S. | - |
| Language and communicative disorders | - | - | - | - | - | Ph.D. |
| Latin American studies | - | - | B.A. | M. A. | - | - |
| Latin American studies/business administration | - | - | - | M.A./M.B.A. | - | - |
| Latin American studies/public administration | - | - | - | M.A./M.P.A. | - | - |
| Latin American studies and public health | - | - | - | M.A./M.P.H. | - | - |
| Lesbian, gay, bisexual, and transgender studies | - | - | B.A. | - | - | - |
| Liberal arts and sciences | - | - | - | M.A. | - | - |
| Liberal studies | B.A. | - | - | - | - | - |
| Linguistics | - | - | B.A. | M.A. | - | - |
| \# Management | - | B.S. | - | - | - | - |
| \# Marketing | - | B.S. | - | - | - | - |
| Mathematics | - | B.S. | B.A. | M.A. | - | - |
| Mathematics and science education | - | - | - | . | - | Ph.D. |
| Mechanical and aerospace engineering | - | - | _ | - | - | Ph.D. |
| Mechanical engineering | - | B.S. | - | - | M.S. | - |
| Medical physics | - | - | - | - | M.S. | - |
| Microbiology | - | B.S. | B.A. | - | M.S. | - |
| Modern Jewish studies | - | - | B.A. | - | - | - |
| Music | - | B.M. | B.A. | M.A. | M.M. | - |
| Nursing | - | B.S. | - | - | M.S. | DNP |
| Nutritional sciences | - | - | - | - | M.S. | - |
| Nutritional science and exercise physiology | - | - | - | - | M.S./M.S. | _ |
| Philosophy | - | - | B.A. | M.A. | M. | - |
| Physical science | B.A. | - | - | - | - | - |
| Physical therapy | - | - | - | - | - | DPT |
| Physics | - | B.S. | B.A. | M.A. | M.S. |  |
| Political science | - | B.S. | B.A. | M.A. | - | - |
| Psychology | B.A. | - | B.A. | M.A. | M.S. | Ph.D. |
| Public administration | B.A. | - | - | M.P.A. | - | - |
| Public administration/Latin American studies | - | - | - | M.P.A./M.A. | - | - |
| Public health | - | - | - | - | M.P.H., M.S. | Ph.D. |
| Public health/Latin American studies | - | - | - | M.A./M.P.H. | M.- | - |
| Public health/social work | - | - | - | - | M.P.H./M.S.W. | - |
| \# Real estate | - | B.S. | - | - | - | - |
| Recreation administration | - | B.S. | - | - | - | - |
| Regulatory affairs | - | B.S. | _ | _ | M.S. | - |
| Rehabilitation counseling | - | _ | - | - | M.S. | _ |
| Religious studies | - | _ | B.A. | - | . | _ |
| Rhetoric and writing studies | - | - | B.A. | M.A. | - | - |
| Russian | - | - | B.A. | - | - | - |
| Russian and Central European studies | - | - | B.A. | - | - | - |
| Social science | - | - | B.A. | - | - | - |
| Social work | - | - | B.A. | - | M.S.W. | - |
| Social work/juris doctor | _ | _ | B.A. | _ | M.S.W./J.D. | - |
| Social work/public health | _ | _ | - | - | M.S.W./M.P.H. | - |
| Sociology | - | - | B.A. | M.A. | - | - |
| Spanish | - | - | B.A. | M.A. | - | - |
| Speech, language, and hearing sciences | - | $\stackrel{-}{-}$ | B.A. | M.A. | - | - |
| Statistics | - | B.S. | - | - | M.S. | - |
| Structural engineering Sustainability | - | - | - | - | - | Ph.D. |
| Sustainability Television, film and new media | - | - | B.A. | - | - | - |
| Television, film and new media Theatre arts | - | B.S. | - | M.A. | - | - |
| Theatre arts Urban studies | B.A. | - | - | M.A., M.F.A. | - | - |
| Women's studies | - | - | B.A. B.A. | M.A. | - | - |

## 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 MAJORS
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 Design
Multimedia
Painting and Printmaking
Painting and
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
Evolution and Systematics
Marine Biology
Zoology
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
Environmental Sciences
(B.S., Applied Arts and Sciences)

Emphasis:
Wmphasis:
Geography (B.A., Applied Arts and Sciences)
Emphasis:
Foundations of Geography
Geography (B.A., Liberal Arts and Sciences)
Emphases:
Integrative Geography
Environment and Society
Human Geography and Global Studies
Methods of Geographic Analysis
Geography
(B.S., Applied Arts and Sciences)

Emphases:
Environmental and Physical Geography
Geographic Information Science
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
Health Science (B.S., Applied Arts and Sciences) Emphasis:
Public Health
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
Japanes
Japanes
Portuguese
Portuguese
Russian
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
North America/Spanish
North America/Spanish
Central Europe/Russian
Western Europe/French
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
Mathematics
Science
Mathematics (B.S., Applied Arts and Sciences)
Emphases:
Applied Mathematics
Computational Science
Science
Mechanical Engineering
(B.S., Applied Arts and Sciences)

Emphasis:
Bioengineering
Microbiology (B.S., Applied Arts and Sciences)
Emphasis:
Clinical Laboratory Science and Public Health Microbiology
Public Administration
(B.A., Applied Arts and Sciences)

Emphasis:
City Planning
Recreation Administration
(B.S., Applied Arts and Sciences)
(B.S., Applie

Outdoor Resource Management
Recreation Systems Management
Sustainable Tourism Management
Social Science (B.A., Liberal Arts and Sciences)
Emphasis:
Islamic and Arabic Studies
Statistics (B.S., Applied Arts and Sciences)
Emphases:
Actuarial Science
Statistical Computing
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 for Theatre
Design for Television and Film
Performance: Acting and Musical Theatre
Youth Theatre
GRADUATE MAJORS
Applied Mathematics (M.S.)
Concentrations.
Dynamical Systems
Mathematical Theory of Communication Systems
Art (M.A.)
Concentrations:
Art History
Studio Arts
Bioinformatics and Medical Informatics (MS)
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
Concentration (M.S.):
Professional Applications
Concentration (Ph.D.): Statistics
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
Learning Design and Technology
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
Community Health Nursing
Nursing Education
Nursing Leadership in Health Care Systems
Women's Health and Midwifery
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 (MAT)
Concentrations.
Language Arts Education (summer only)
Manguage Arts Eduction
Mathematics Education
Reading/Language
Science Education
Secondary Education
Theatre Arts (M.F.A.)
Concentrations:
Acting
Design and Technical Theatre Musical Theatre

## Credentials Offered

Teaching Credentials
Multiple subject; internship
Multiple subject cross-cultural, language and academic development (CLAD) emphasis
Multiple subject bilingual 2042.
emphasis: Spanish; internship (Spanish)
Single subject; internship
Single subject cross-cultural, language, and academic development (CLAD) emphasis
Single subject bilingual 2042
Specialist Credentials
BCLAD
Education Specialist for the deaf and hard of hearing, levels I and II
Reading/Language Arts
Special Education:
Early Childhood Special Education, levels I and II; 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; internship
School Social Work
School Nurse Services
Speech Language Pathology
Minors for the
Bachelor's Degree
Accounting
Aerospace 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
ication
Comparative Literature
Computer Science
Counseling and Social Change
Creative Editing and Publishing
Creative Writing
Dance
Digital and Social Media Studies
Economics
Energy Studies
Engineering
English
Entrepreneurship
Environment and Society
European Studies
Finance
French
Geography
Geological Sciences
German
Gerontology
Health Science
History
Honors in Interdisciplinary Studies
Humanities
Information Systems
International Security and Conflict
Resolution
International Studies, PSFA
Italian
Islamic and Arabic Studies
Japanese
Japan Studies
Judaic Studies
Latin American Studies
Leadership Development
Learning Design and Technology
Lesbian, Gay, Bisexual, and Transgender Studies
Linguistics
Management
Marketing
Mathematics
Military Science
Music
Naval Science
Oceanography
Philosophy
Physics
Political Science
Portuguese
PSFA International Studies
Psychology
Public Administration
Real Estate
Recreation
Religious Studies
Rhetoric and Writing Studies
Russian
Social Work
Sociology
Spanish
Statistics
Teaching English as a Second or Foreign Language (TESL/TEFL)
Television, Film and New Media
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 <br> (nondegree)

Accounting
Applied Gerontology
Artist Diploma

Behavior Analysis
Bilingual (Spanish) Special Education
Bilingual Speech-Language Pathology
Biomedical Quality Systems
Biotechnology
siness Administration
(Imperial Valley Campus Only)
Children's/Adolescent Literature
Cognitive Disabilities
Communication
Communication Systems
Community College Teaching
Computational Linguistics
Developing Gifted Potential
Distance Education
Dual Language for Academic Literacy
Early Childhood-Socio-Emotional and Behavior Regulation Intervention Specialist
Early Care and Education
Early Childhood Special Education Authorization
Educational Facility Planning
English Language Development for Academic Literacy
Entertainment Management
Environmental Studies
Executive Financial Planner
Family Life Education
Geographic Information Science
Health Communication
Industrial/Organizational Psychology
Institutional Research, Planning, and Assessment
Instructional Design
Instructional Technology
Intellectual Property and Regulatory Affairs
International Media
International Security and Trade
Korean Studies
Lesbian, Gay, Bisexual, and Transgender Studies
Linked Learning
Mathematics Specialist
Nursing Education
Nursing Edu
Personal Financial Planning
Personal Financial Planning
Preventive Medicine Residency
Preventive Medicine Residency
Preprofessional Health Preparation
Professional Computational Science
Protessional Computational Science
Professional Writing
Psychiatric Rehabilitation
ublic Administration
(Imperial Valley C
(Imperial Valley Campus Only)
Public Health
Public Law
Reading
Regulatory Affairs
Rehabilitation Administration
Rehabilitation Counseling
Rehabilitation Technology
Residency Training in Radiation Therapy Physics
Single Subject Mathematics
Social Work Administration
Supported Employment and Transition Specialist
Teaching English as a Second or Foreign Language (TESL/TEFL)
Teaching of Writing
Translation and Interpretation Studies (Spanish)
United States-Mexico Border Studies
Web and Mobile Applications Development
Women's Studies
Workforce Education and Lifelong Learning
The following non-credit programs are available
through College of Extended Studies only.
Business of Wine
Construction Estimating Online
Construction Practices
Construction Supervisory Online
Contract Management
Digital and Social Media
Grant Writing
Green Building Construction
Health Care
Human Resource Management
Lean Enterprise
Lean Six Sigma
Marketing and Media
Medical Office Procedures
Meeting and Events Planning
Nutrition for Optimal Health
Occupational Health and Safety Management
Project Management
Residential and Commercial Sustainable Practices
Teaching English as a Second Language
Teaching English as a Second Language
Water Management and Landscape Sustainability

## Major and Credential Codes*



|  | MAJOR M | MAJOR CODE |
| :---: | :---: | :---: |
| Latin American Studies |  |  |
|  | and Public Administration |  |
|  | (concurrent program) | 21020 G |
| Latin American Studies |  |  |
|  | and Public Health |  |
|  | (concurrent program) | 49062 G |
| Lesbian, Gay, Bisexual, and |  |  |
|  | Transgender Studies | 22990 U |
|  | Liberal Arts and Sciences | 49017 G |
|  | Liberal Studies | 49015 U |
|  | Linguistics | 15051 U \& G |
| $+$ | ¢ Management | 05061 U \& G |
|  | ¢ Marketing | 05091 U \& G |
|  | Mathematics-B.A. degree | 17011 U \& G |
|  | Mathematics-B.S. degree | 17031 U |
| Mathematics and Science |  |  |
|  | Education | 08997 G |
|  | Medical Physics | 12251 G |
|  | Microbiology | 04111 U \& G |
|  | Modern Jewish Studies | 15102 U |
|  | ¢ Molecular Biology | 04161 G |
|  | Music | 10041 U \& G |
|  | Music | 10051 U \& G |
|  | Nursing | 12031 U |
|  | Nursing | 12032 U \& G |
|  | Nutritional Sciences | 13061 G |
| Nutritional Science and |  |  |
|  | Exercise Physiology |  |
|  | (concurrent program) | 08356 G |
|  | ¢ Operations Management | 05064 G |
|  | Philosophy | 15091 U \& G |
|  | Physical Science | 19011 U |
|  | Physics | 19021 U \& G |
|  | $\not \subset$ Physiology | 04101 G |
|  | Political Science | 22071 U \& G |
|  | Psychology | 20011 U \& G |
|  | Public Administration | 21021 U \& G |
| Public Administration and Latin American Studies |  |  |
|  |  |  |
|  | (concurrent program) | 21020 G |
|  | Public Health | 12141 G |
|  | ¢ Health Behavior | 12143 G |
| Public Health and Latin |  |  |
|  | American Studies |  |
|  | (concurrent program) | 49062 G |
| Public Health and Social Work |  |  |
|  | (concurrent program) | 12991 G |
| + | ¢ Real Estate | 05111 U \& G |
|  | Recreation Administratio | 21031 U |
|  | Regulatory Affairs | 49045 G |
|  | Rehabilitation Counseling | 12221 G |
|  | Religious Studies | 15101 U |
|  | Rhetoric and Writing Studies | S 15013 U \& G |
|  | Russian | 11061 U |
| Russian and Central |  |  |
|  | European Studies | 03071 U |
|  | Social Science | 22011 U |
|  | Social Work | 21041 U \& G |
|  | Social Work and Juris Doctor |  |
| Social Work and Public Health |  |  |
|  | (concurrent program) | 12991 G |
|  | Sociology | 22081 U \& G |
|  | Spanish | 11051 U \& G |
| Speech, Language, and |  |  |
|  | Hearing Sciences | 12203 U \& G |
|  | Statistics | 17021 U \& G |
|  | Sustainability | 49101 U |
| ¢ Systematics and Evolutionary |  |  |
|  | Biology (Zoology) | 04071 G |
|  | ¢ Taxation | 05022 G |
|  | Television, Film and |  |
|  | New Media Production | 06031 U \& G |
|  | Theatre Arts | 10071 U \& G |
|  | Theatre Arts - MFA | 10072 G |
|  | Undeclared | 00000 U |
|  | Urban Studies | 22141 U |
|  | Vocational Education | 08395 U |
| + | Watershed Science | 49052 U |
|  | Women's Studies | 49991 U \& G |

* See following page for NUMERICAL LISTING OF MAJOR CODES and CREDENTIAL CODES.

NUMERICAL LISTING OF MAJOR CODES

MAJOR COD
00000 U
02031 U
03011 U \& G
03011 U
03071 U
03081 U \& G
03101 U
04011 U \& G
04016 G
04101 G
04111 U \& G 04161 G
04201 G
05011 U \& G
05011 G
05016 G
05021 G
05021 U
05022 G
05041 U \& G
05043 U
05061 U \& G
05064 G
05081 U \& G
05091 U \& G
05111 U \& G
05131 U \& G
05151 G
05992 U
05997 G
06010 G
06011 G
06021 U
06031 U \& G
06041 U
06991 U
07011 U \& G
07021 U \& G
07992 G
07994 G
08011 G
08021 G
08031 G
08081 G
08231 U \& G
08261 G
08271 G
08272 G
08273 G

08291 G
08292 G
08301 G
08351 U
08355 G
08356 G

08375 U
08375 U
08992 G
08994 G
08997 G
09021 U \& G
09051 U \& G
09081 U \& G
09084 G
09091 U \& G
$\quad$ MAJOR
$\quad$ Undeclared

+ Interior Design
$申$ City Planning
Asian Studies
+ 

Chinese Studies and
Language

MAJOR CODE 09094 U
09101 U \& G
09134 G
09221 U \& G
09254 U
10021 U G
10022 G

10041 U \& G
10051 U \& G
10071 U \&
10072 G
10081 U
10082 U
10091 U
10091 U
11021 U G
11031 U G
11051 U \&
11061 U
11081 U
12011 U
12031 U \& G
12032 U
12032 U
12033 G
12122 G
12141 G
12143 G
$12202 G$
$12203 G$
12203 U \& G
12221 G
12251 G
12991 G

13061 U
13061 G
15011 U \& G
15013 U \&
15031 U
15041 U
15051 U \& G
15060 U
15061 U
15071 G
15091 U $\mathrm{G}_{\mathrm{G}}$
15101 U
15102 U
15991 U
17011 U \& G
17012 G
17021 U \& G
17031 G
17031 U
19011 U
19011 U
19020 G
19021 U \& G
19051 U \& G
19051 U
19081 U
19111 U \& G
19141 G
20011 U \&
20013 G
20013 G
21020 G
21021 U \& G
21031 U
21041 U \& G
21041 G
21043 U \& G
21051 U
21051 G
22011 U
22021 U \& G
22041 U \& G
22042 U
22051 U \& G

## MAJOR

Computer Engineering
Electrical and Computer Engineering
Mechanical Engineering
Engineering
\& Environmental Engineering
Construction Engineering
Art
Art - MFA

+ $\neq$ Art History
Music
Theatre Arts
Theatre Arts
Theatre Arts - MFA
Dance
Dance - BFA
+ Graphic Design
French
German
Spanish
Russian
Japanese
Health Science
Nursing
Nursing of Nursing Practice
Doctor of Physical Therapy
Public Health
\& Health Behavior
Audiology
Language and Communicative Disorders
Speech, Language, and Hearing Sciences
Rehabilitation Counseling
Medical Physics
Social Work and Public Health (concurrent program)
Foods and Nutrition
Nutritional Sciences
Nutritional Sciences
English
Rhetoric and Writing Studies
Comparative Literature
Classics
Linguistics
+ Media Studies
Communication
Creative Writing
Philosophy
Religious Studies
Modern Jewish Studies
Humanities
Mathematics-B.A. degree
\& Mathematics Education K-8
Statistics
Applied Mathematics
Mathematics-B.S. degree
Physical Science
Mechanical and Aerospace Engineering
Physics
Chemistry
Biochemistry
Chemical Physics
Astronomy
Geological Sciences
Geophysics
Psychology
School Psychology (Ed.S.)
Clinical Psychology
Public Administration and Latin American Studies (concurrent program
Public Administration
Recreation Administration
Social Work
Social Work and Juris Doctor (concurrent program)
Gerontology
Criminal Justice
$\phi$ Criminal Justice Administration
Social Science
Anthropology
Economics
+ International Economics
History

MAJOR CODE
22061 U \& G
22071 U \& G
22081 U \& G
22091 G
22102 G
22103 U
22111 U
22131 U \& G
22141 U
22990 U
22997 U
49011 U
49015 U
49017 G
49045 G
49052 U
49061 G

49062 G
MAJOR
Geography
Political Science
Sociology
Criminal Justice and
Criminology
Homeland Security
International Security and
Conflict Resolution
Africana Studies
American Indian Studies
Chicana and Chicano
Studies
Urban Studies
Lesbian, Gay, Bisexual, and
Transgender Studies
Comparative International Studies
Environmental Sciences
Liberal Studies
Liberal Arts and Sciences
Regulatory Affairs

+ Watershed Science
Business Administration and Latin American Studies (concurrent program)
Latin American Studies and Public Health
(concurrent program)
49075 G Interdisciplinary Research
on Substance Use
49101 U
49991 U \& G
CODES FOR CREDENTIALS


## CREDENTIAL

CODE
Single Subject Instruction
Multiple Subject Instruction 00200

Bilingual Authorization
Multiple Subject
Bilingual Specialist 00440
Special Education: Early Childhood
Special Education 00436

| Special Education: Mild/Moderate |
| :--- |
| Disabilities | 00481


| Special Education: Moderate/Severe |
| :---: |
| Disabilities |

00482

Administrative Services (Preliminary) 00501
Administrative Services (Professional

| Administrative Services (Professional | 00502 |
| :--- | :--- |
| Clear) | 00600 |

School Nurse Services
Pupil Personnel Services
School Counseling
Child Welfare and Attendance or 00802
Child Welfare and Attendance or 00801
School Social Work
School Social Work
School Psychology
Speech Language Pathology
00803
00804
Speech Language Pathology 00900
Language, Speech, Hearing, and Audiology

00902
Language, Speech, and Hearing
including Special Class Authorization

00910
Language, Speech, and Hearing 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 the College of Extended Studies.

## 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 junio 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; History 545; 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.

## Preprofessional Health Advising Office

The Preprofessional Health 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 with 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 preprofessional health advising (PPHA) orientation to learn about general requirements and establish a PPHA file in their first semester at SDSU and 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 must sign up for orientation and open a file any time after the beginning of the semester. The advising office is located in GMCS 323. Contact the office at 619-594-6638 or visit http://www.sci.sdsu.edu/ preprof

Note: Prephysical therapy and preoccupational therapy students must 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 higher (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.

## 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.

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 CSU Mentor.

For a listing of admission standards and specific certificate requirements, refer to the Graduate Bulletin.



## Course Information

## 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. To reenroll, the student must receive an add code from the instructor and reenroll in the course by 11:59 p.m on the 10th day from the first day of classes. 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

## Schedule Adjustment Policy

The schedule adjustment period allows you to drop a course, add a course, withdraw from the university, and change the grading basis of a course. The schedule adjustment deadline is at 11:59 p.m. on the 10th day from the first day of classes. You are not allowed to make any schedule adjustments after this deadline and are responsible for knowing the current semester's date for this deadline, which can be found on the academic calendar and the Class Schedule registration notice. Summer deadlines vary by session. Consult the Class Schedule for specific dates

## 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 or their majors. 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 Genera 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 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.

## 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 o 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 postbaccalaureate 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 profes sional 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 X-79 and X-397 are professional development units offered only through the College of Extended Studies 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 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 <br> 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 is posted outside each faculty member's office door and on their course syllabi.

## Accreditation

San Diego State University is accredited by the Accrediting Commission for Senior Colleges and Universities 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. wascweb.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, www.abet.org
Accreditation Council for Graduate Medical Education (Preventive Medicine Residency Program)
515 N. State Street, Suite 2000
Chicago, IL 60654
312-755-7498
American Association of Colleges for Teacher Education
1307 New York Ave, NW
Washington, D.C. 20005
202-293-2450, http://www.aacte.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 20910-6374
240-485-1802, http://www.midwife.org
American Psychological Association (Clinical Psychology)
750 First Street, NE
Washington, D.C. 20002-4242
202-336-5500, http://www.apa.org
Council on Academic Accreditation in Audiology and Speech-Language Pathology
2200 Research Boulevard
Rockville, MD 20850-3289
301-296-5700, http://www.asha.org
California Commission on Teacher Credentialing
1900 Capitol Avenue
Sacramento, CA 95811
888-921-2682, http://www.ctc.ca.gov
Commission on Accreditation of Healthcare Management Education
2000 14th Street North, Suite 780
Arlington, VA 22201
703-894-0960, http://www.cahme.org
Commission on Collegiate Nursing Education
One Dupont Circle, NW, Suite 530
Washington, D.C. 20036-1120
202-887-6791, http://www.aacn.nche.edu
Council for Interior Design Accreditation
146 Monroe Center NW, \#1318
Grand Rapids, MI 49503-2822
616-458-0400, http://www.accredit-id.org/
Council of Graduate Schools
One Dupont Circle, NW, Suite 430
Washington, D.C. 20036-1173
202-223-3791, http://www.cgsnet.org
Council on Education for Public Health
1015 Fifteenth Street, NW
Washington, D.C. 20005
202-789-1050, http://www.ceph.org
Council on Social Work Education
1725 Duke Street, Suite 500
Alexandria, VA 22314-3457
703-683-8080, http://www.cswe.org
National Association of School Psychologists
4340 East West Highway, Suite 402
Bethesda, MD 20814
301-657-0280, 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 Public Affairs and Administration
1120 G Street, NW, Suite 730
Washington, D.C. 20005-3801
202-628-8965, http://www.ceph.org
National Association of Schools of Theatre
11250 Roger Bacon Drive, Suite 21
Reston, VA 20190-5248
703-437-0700, http://nast.arts-accredit.org
National Council on Rehabilitation Education
c/o Charles Arokiasamy, Chief Operating Officer
California State University, Fresno
5005 N. Maple Ave, M/S ED 3
Fresno, CA 93740
559-906-0787, http://www.ncre.org
National Recreation and Park Association
22377 Belmont Ridge Road
Ashburn, VA 20158
703-858-0784, http://www.nrpa.org
Western Association of Graduate Schools
University of Washington, The Graduate School
Box 351240
Seattle, WA 98195-1240
206-543-9054, http://www.wagsonline.org
In addition, San Diego State University is accredited by the following agencies

The College of Business Administration and the School of Accountancy are accredited by AACSB International-The Association to Advance Collegiate Schools of Business-at both the undergraduate and graduate levels. Several College of Business Administration 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.

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 66045-7575, 785-864-3973,
http://www2.ku.edu/~acejmc.
The School of Nursing is accredited by the California Board of Registered Nursing, State of California, Department of Consumer Affairs, 400 R Street., Suite 4030, Sacramento, CA 95814, 916-322-3350.

Concentrations in Environmental Health and Occupational Health, in the Graduate 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), Academy of Nutrition and Dietetics, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, 800-877-1600, http://www.eatright.org.

| Course Abbreviations |  |
| :---: | :---: |
| ACCTG ........... Accountancy |  |
| ARP................... Administration, Rehabilitation and Post Secondary Education |  |
| A E..... | .. Aerospace Engineering |
| A S | . Aerospace Studies |
| AFRAS ............ Africana Studies |  |
| AMIND ............ American Indian Studies |  |
| ANTH .............. Anthropology |  |
| ARAB .............. Arabic |  |
| ART ................. Art |  |
| ASIAN ............. Asian Studies |  |
| ASTR.............. Astronomy |  |
| AUD ................ Audiology |  |
| BIOMI ............. Bioinformatics and Medical Informatics |  |
| BIOL ............... Biology |  |
| BQS ................ Biomedical Quality Systems |  |
| B A.................. Business Administration |  |
| CAL................ Arts and Letters |  |
| CHEM ............. Chemistry |  |
| CCS ................ Chicana and Chicano Studies |  |
| CFD ................ Child and Family Development |  |
| CHIN............... Chinese |  |
| C P................. City Planning |  |
| CIV E............... Civil Engineering |  |
| CLASS ............ Classics |  |
| COMM ............ Communication |  |
| CINTS ............. Comparative International Studies |  |
| C LT ................ Comparative Literature |  |
| COMP............. Computational Science |  |
| COMPE........... Computer Engineering |  |
| CS.................. Computer Science |  |
| CON E ............ Construction Engineering |  |
| CSP................. Counseling and School Psychology |  |
| CJ .................. Criminal Justice |  |
| DANCE ........... Dance |  |
| DPT................. Doctor of Physical Therapy |  |
| DLE................ Dual Language and English Learner Education |  |
| ECON ............. Economics |  |
| ED.................. Education |  |
| EDL................ Educational Leadership |  |
| E E .................. Electrical Engineering |  |
| ENGR.............. Engineering |  |
| ENGL .............. English |  |
| ENV E ............. Environmental Engineering |  |
| ENV S ............. Environmental Science |  |
| EUROP ............ European Studies |  |
| ENS................ Exercise and Nutritional Sciences |  |
| FILIP ............... Filipino |  |
| FIN................. Finance |  |
| FRENC............ French |  |
| GMS................ General Mathematics Studies |  |
| GEN S............. General Studies |  |
| GEOG .............. Geography |  |
| GEOL.............. Geological Sciences |  |
| GERMN............ German |  |
| GERO ............. Gerontology |  |
| HHS ............... Health and Human Services |  |
| HEBRW ........... Hebrew |  |
| HIST... | . History |
| H SEC... | .. Homeland Security |

ACCTG Accountancy

BQS .................. Biomedical Quality Systems
B A................ Business Administration
CAL.................. Arts and Letters
CHEM .............. Chemistry
CFD ..................... Child and Family Development
CHIN............... Chinese
CIV E................. Civil Engineering
CLASS ............. Classics
COMM ............. Communication
CINTS .............. Comparative International Studies
COMP …...........Computational Science
COMPE ............ Computer Engineering
CON E ............. Construction Engineering
CSP.................. Counseling and School Psychology
DANCE ............ Dance
DPT.................. Doctor of Physical Therapy
DLE.............. Dual Language and English Learner Education
ECON .............. Economics
EDL..................... Educational Leadership
E E................... Electrical Engineering
.......Engineering
ENV E .............. Environmental Engineering
ENV S .............. Environmental Science
EUROP ............ European Studies
ENS................. Exercise and Nutritional Sciences
ILIP ................ Filipino
FRENC .........................
GMS................. General Mathematics Studies
GEOG ............ General Studies
GEOL............... Geological Sciences
GERMN............ German
GERO .............. Gerontology
HEBRW............. Hebrew

H SEC .............. Homeland Security

| HONOR .......... Honors College |  |
| :---: | :---: |
| 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 |  |
| 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 |

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 SDSU General Catalog 2015-2016
# Accountancy 

In the College of Business Administration

## OFFICE: Student Services East 2411 <br> TELEPHONE: 619-594-5070 / FAX: 619-594-3675 E-MAIL: accounting@sdsu.edu

A member of AACSB International-The Association to Advance Collegiate Schools of Business.

## Faculty

Emeritus: Barnett, Brodshatzer, Butler, Capettini, Chow, Doran, Garrett, Houston, Lightner, K., Meier, Meigs, Samuelson, Toole, Venable, Whittington, Williamson

## Director: Chang

The Vern E. Odmark Chair in Accountancy: Chang
Professors: Anderson, Chang, Grudnitski, Krivogorsky, Oestreich Associate Professors: Chan, DeBoskey, Fleming, Gill, Joh
Assistant Professors: Kawada, Luo
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 accounting.

## 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. 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 College of Business Administration, 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 College of Business Administration expects that all business students will make reasonable academic progress towards the degree. Business premajors who have completed major preparatory courses, 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.

## Business Passport

All majors in the College of Business Administration will be introduced to the Business Passport in Business Administration 310, and complete the Business Passport in the capstone course (Business Administration 404, 405, or 458). Contact the Business Advising Center (EBA-448), 619-594-5828, for more information.

## 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 College of Business Administration.

Upper Division: It is the policy of the San Diego State University College of Business Administration 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 or higher: 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 threeunit 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 Business Advising Center (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 or higher: 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 or 326); Business Administration 300, 310, 323, 350, 360, 370. Business Administration 404, 405, or 458 (three units). 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, a minimum overall GPA of 3.0, a minimum SDSU GPA of 3.0, and a minimum upper division SDSU College of Business Administration GPA of 3.0. 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 grade of 3.0 among the completed courses (upper division Accountancy core courses include Accountancy 331, 332, 333, 334, 431, 432).

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.

## Suggested Course of Study for the BS/MS 4+1 Degree Program (BMACC):

## JUNIOR YEAR (Fall Semester)

Units
Accountancy 331........................................................... 3
Business Administration 310 ........................................... 1
Business Administration 350 ............................................ 3
Business Administration 360 ........................................... 3
Management Information Systems 301.......................... 3
General Education Explorations of Human Experience .. 3
16
JUNIOR YEAR (Spring Semester)
Accountancy 332............................................................. 3
Accountancy 333........................................................... 3
Accountancy 334.............................................................. 3
Business Administration 300 .......................................... 1
Business Administration 323 ............................................ 3
General Education Explorations of Human Experience. 3
$\overline{16}$

## SENIOR YEAR (Fall Semester)

Accountancy 390W ........................................................ 4
Accountancy 431........................................................... 3
Accountancy 432.......................................................... 3
Business Administration 370 ............................................ 3
Graduate elective 500- and above................................ 3

## SENIOR YEAR (Spring Semester)

Business Administration 404, 405, or 458 ....................... 3
Graduate accountancy elective 500- and above ............. 6
General Education Explorations of Human Experience... 3
Graduate elective 600- and above................................. 3

FIFTH YEAR (Fall Semester)
Graduate elective 600- and above................................. 3
Graduate elective 600- and above.................................. 3
Graduate elective 600- and above................................. 3
Internship....................................................................... 0

FIFTH YEAR (Spring Semester)
Graduate elective 600- and above................................. 3
Graduate elective 600- and above.................................. 3
Accountancy 790.............................................................. 3
Prepare and pass professional certification examination ........................................... 0 9
Total preparation for the major ........... 61
Electives (See BMACC Adviser) ........... 9
Overall total for BS/MS 4+1 degree program (BMACC) 150

## Accounting Minor

## (SIMS Code: 221910)

The minor in accounting consists of a minimum of 24 units to include Accountancy 201, 202, 331*, 332*, 333, 334, Economics 101, 102. Accountancy 201 and 202 must be completed with a minimum grade of $C$ (2.0) to declare 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. Students with a major in the College of Business Administration, Hospitality and Tourism Management, or International Business should choose courses carefully with an adviser in their major department and the Business Advising Center.

Students must meet the prerequisites for the minor in effect at the time that they declare the minor. Contact the Business Advising Center 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.


## Accounting Certificate

## (SIMS Code: 221003)

The purpose of the Accounting Certificate is to provide professional and post-baccalaureate certification to accounting and nonaccounting professionals.

Students must apply and be admitted to the program before the completion of 18 certificate units. The certificate requires 30 units to include Accountancy 201, 202, 331*, 332*, and 18 units of approved electives to make a total of 30 units. Accountancy 201 and 202 must be completed with a minimum grade of $C$ (2.0) and the certificate coursework must be completed with a minimum grade point average of C (2.0).

Courses with relevant content may be substituted for the courses listed above with the approval of the certificate adviser. Courses in the certificate may not be counted toward the major or minor.

* General Education prerequisite waived for students in this program.


## Courses (accta)

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; Management Information Systems 180; Mathematics 120; and either Statistics 119 or Economics 201. 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; Management Information Systems 180; Mathematics 120; and either Statistics 119 or Economics 201. 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. Completion of General Education requirement in Communication and Critical Thinking. 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. (Accountancy 331 and 332 formerly numbered Accountancy 321.)

## ACCTG 332. Taxation of Business Entities (3)

Prerequisites: Admission to accounting major, minor, or certificate. 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. (Accountancy 331 and 332 formerly numbered Accountancy 321.)

## 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 decisionmaking. (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 C or higher in Rhetoric and Writing Studies 280, 281, or Linguistics 281 if score on WPA was 7 or lower) and completed General Education requirements in Composition 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) Cr/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. Not applicable to an accounting major or minor. 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: Business Administration 323. For accounting majors, a minimum grade of C in Accountancy 331. For finance majors, a minimum grade of $C$ in Accountancy 326 and Rhetoric and Writing Studies 290. Proof of completion of prerequisites required: Copy of transcript.

Use of accounting information to facilitate managerial 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)

Prerequisites: Minimum grade of C in 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 390W; minimum grade of C in Accountancy 334 (or Accountancy 620 and 625). 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 College of Business Administration 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 <br> In the College of Education 

OFFICE: Education and Business Administration 246
TELEPHONE: 619-594-6115
http://interwork.sdsu.edu/arpe
Accredited by the Council on Rehabilitation Education.

## Faculty

Emeritus: Atkins, Jacobs, McFarlane, Morey, Piland, Stevens
Chair: Sax
Professors: Bresciani Ludvik, Degeneffe, Hampton, Olney, Sax Associate Professors: Harris, Wood
Assistant Professors: Jeffcoat, Tucker
Lecturer: Bracken
Adjunct: Starck, Tarbox

## 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 institutional research, planning, and assessment (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 workforce education and lifelong learning (refer to the Graduate Bulletin).
Certificate in supported employment and transition specialist (refer to the Graduate Bulletin).

## Leadership Development Minor

(Minor Code: 08271) (SIMS Code: 331907)
The minor in leadership development consists of a minimum of 17 units to include Administration, Rehabilitation and Postsecondary Education 205, 380, 403; Educational Leadership 404, 405; and six units of electives selected from Communication 371, Political Science 375, Public Administration 330, 340, 480, Philosophy 329, 330, 332, 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 (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: Intermediate algebra, satisfaction of the Entry-Level Mathematics 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; Political Science 201; Psychology 280; Sociology 201; Statistics 119, 250.

## ARP 205. Exploring Leadership (3)

Understanding, applying and critiquing leadership theories, examining personal strengths, values, goals, and philosophy of leadership.

## 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 <br> (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 in the College of Extended Studies)
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. Field laboratory in Leadership: Campus and Other Postsecondary Settings (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 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 COURSES (Also Acceptable for Advanced Degrees)

## ARP 568. Adult and Vocational Education in Contemporary

 Society (3)Prerequisite: Upper division standing
Contemporary adult and vocational education in the U.S. Learning opportunities and environments, instructional delivery systems, and adult learning models.

## 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 <br> In the College of Engineering 

## OFFICE: Engineering 308 <br> TELEPHONE: 619-594-6074 <br> E-MAIL: ae@engineering.sdsu.edu

The undergraduate degree in Aerospace Engineering is accredited by the Engineering Accreditation Commission (EAC) of ABET, Inc., 415 North Charles Street, Baltimore, MD 21201; telephone: 410-347-7700.

## Faculty

Emeritus: Conly, Dharmarajan, Pierucci, Shutts, Wang
Chair: Nosseir
Professors: Jacobs, Katz, Narang, Nosseir, Plotkin, Venkataraman Associate Professor: Demasi
Assistant Professor: Liu

## 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.

## General Education

Students will complete a minimum of 50 units in General Education, to include a minimum of nine upper division units taken after attaining junior class standing. No more than 12 units may be used for General Education credit from any one department or academic unit. No more than 7 units from one department can be used in Sections II and IV combined (Foundations of Learning and Explorations of Human Experience), nor more than 10 units from one department in Sections II, III, and IV combined (Foundations of Learning, American Institutions, and Explorations of Human Experience).
I. Communication and Critical Thinking: 9 units

You may not use Credit/No Credit grades in this section.

1. Oral Communication (3 units)
2. Composition (3 units)
3. Intermediate Composition and Critical Thinking (3 units)
II. Foundations of Learning: 29 units
A. Natural Sciences and Quantitative Reasoning (17 units):
4. Physical Sciences (11 units)

Engineering students will take Chemistry 202 (4 units) or Chemistry 200 (5 units).

Physics 195 (3 units)
Physics 195L (1 unit)
Physics 196 (3 units)
2. Life Sciences (3 units) Engineering students will take Biology 100 or 101.
3. Laboratory (satisfied under A.1. above)
4. Mathematics/Quantitative Reasoning Engineering students will take Mathematics 150, 3 units applicable to General Education. You may not use Credit/No Credit grades.
B. Social and Behavioral Sciences (3 units)
C. Humanities (9 units)

Complete three courses in three different areas. One of these courses and the one under IV.A. below must be taken in the same department.
III. American Institutions: Three units of the six units of coursework which meet the American Institutions graduation requirement may be used to satisfy this section, excluding courses numbered 500 and above.
IV. Explorations of Human Experience: Courses in this area must not be taken sooner than the semester in which you achieve upper division standing ( 60 units passed). Upper division courses in the major department may not be used to satisfy General Education. Total 9 units; must include one course of cultural diversity.
A. Upper division Humanities (3 units)

Three units must be taken from the same department as one of the Humanities courses selected in Foundations of Learning.
B. Upper division Social and Behavioral Sciences (3 units).
C. Upper division Social and Behavioral Sciences (Engineering majors may satisfy this area with an additional American Institutions course (excluding 500-level) to complete the American Institutions requirement if this requirement was not completely satisfied with lower division coursework) (3 units).

## The Major

The objectives of the aerospace engineering program are to produce Bachelor of Science graduates who (1) Will be able to use their comprehensive education in aerospace engineering, which includes a strong background in mathematics, science, and engineering fundamentals, and their application to the major sub-disciplines of the field, in their future careers. These sub-disciplines are aerodynamics, structures, flight mechanics, stability and control, propulsion and aerospace design. (2) Will be able to employ their strong analysis and problem solving skills in their future careers in aerospace engineering or related fields. In addition, they will exhibit the following attributes in their professional activities: individual initiative, ability to work in teams, good communication skills, and ethical professional behavior. (3) Will have an appreciation of the need for lifelong learning in their careers. This will lead some to the pursuit of graduate study and career paths in research and development.

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 aerospace-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.

## 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 or higher: 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 (Cr/NC);
b. Have an overall cumulative GPA of 2.5 .

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

## 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, performance, structural analysis, aerodynamics, and propulsion.

The program below describes 137 units required for the degree. Each course specifically listed in the program is required.

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 101, 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 or higher. These courses cannot be taken for credit/no credit (Cr/NC).

General Education. Engineering students must follow the specific General Education program outlined in this section of the catalog. Other general education requirements and limitations, as well as listings of specific General Education course electives are presented in the General Education section of Graduation Requirements for the Bachelor's Degree.

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, 540, 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

## A E 200. Statics (3)

(Same course as Mechanical Engineering 200)
Prerequisites: Physics 195 and credit or concurrent registration in Mathematics 151. Proof of completion of prerequisites required: Copy of transcript or registration confirmation.

Force systems, equilibrium, structures, distributed forces, friction virtual work, moments of inertia, vector algebra. (Formerly numbered Engineering Mechanics 200.)

## A E 220. Dynamics (3)

(Same course as Mechanical Engineering 220)
Prerequisite: Aerospace Engineering 200 or Mechanical Engineering 200 with a grade of C or better. Proof of completion of prerequisite 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. (Formerly numbered Engineering Mechanics 220.)

## 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. (Formerly numbered Engineering 280.)

## 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 <br> (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.

## A E 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. Aerospace Flight Mechanics (3)

Prerequisites: Aerospace Engineering 220 or Mechanical Engineering 220 and Aerospace Engineering 280

Two-body orbital mechanics including geocentric orbits and interplanetary transfers

## A E 340. Fluid Mechanics (3)

Prerequisites: Aerospace Engineering 220 or Mechanical Engineering 220; and credit or concurrent registration in Aerospace Engineering 280.

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. (Formerly numbered Engineering Mechanics 340.)

## A E 341. Fluid Mechanics Laboratory (1)

Three hours of laboratory.
Prerequisite: Credit or concurrent registration in Aerospace Engineering 340.

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. (Formerly numbered Engineering Mechanics 341.)

## 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 or Mechanical Engineering 351.

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 <br> (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. (Formerly numbered Engineering Mechanics 510.)
A E 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. (Formerly numbered Engineering 510.)

## A E 520. Intermediate Aerospace Flight Mechanics (3)

Prerequisite: Aerospace Engineering 320.
Rigid-body dynamics with applications in spacecraft attitude dynamics.
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. Not open to students with credit in Mechanical Engineering 540. (Formerly numbered Engineering Mechanics 530.)

## 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 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 <br> In the College of Professional Studies and Fine Arts 

OFFICE: Exercise and Nutritional Sciences 385<br>TELEPHONE: 619-594-5545<br>\section*{Faculty}<br>Chair: Grimes<br>Professor: Grimes<br>Assistant Professors: Boethin, Kim, LaBouliere

## Offered by the Department

AFROTC curriculum.
Minor in aerospace 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 four 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. More information about the program can be obtained from the following websites: DET075.com, AFROTC.com, and AirForce.com.

## Aerospace Studies Minor

## (Minor Code: 01019) (SIMS Code: 660101)

The minor in aerospace 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 (As)

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) Cr/NC

One hour and fifty minutes of activity per unit.
Prerequisites for AFROTC cadets: 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 <br> One hour and fifty minutes of activity per unit.

Prerequisites for AFROTC cadets: 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.

## A S 100A-100B. Foundations of the United States Air Force (1-1) <br> 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.

Introduction to organizational structure, mission of selected military organizations, selected topics that contribute to understanding the Air Force today. Includes professional appearance, customs and courtesies, officership and core values, basic communications, officer opportunities, and benefits.

## A S 200A-200B. Evolution of USAF Air and Space Power (1-1) <br> 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.

Study of air and space power through a historical perspective. Techniques for improving communication, discussion of Air Force heritage, leadership basics. Ethics, values, problem solving, and Air Force core values.

## A S 233. Field Training Unit (2-3) Cr/NC

Required for advanced cadets, military orientation and flight familiarization. Credit granted for four- or six-week 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. Air Force Leadership Studies (3-3)

Air Force leadership and management principles. Responsibility and authority of an Air Force officer, subordinate leadership, ethics, standards of conduct, and officer values. Improving writing, briefing skills, counseling, and feedback process.

## A S 400A-400B. National Security Affairs/Preparation for Active <br> Duty (3-3)

Role of professional officer in democratic society, socialization within armed services, requisites for adequate national security forces. Political, economic, and social constraints on national defense structure and impact of technological and international developments on defense policy making.

## A S 499. Special Study (1-3)

Prerequisite: Consent of Aerospace Studies department chair. Individual study. Maximum credit six units.


# Africana Studies <br> In the College of Arts and Letters 

## OFFICE: Arts and Letters 373 <br> TELEPHONE: 619-594-6531 <br> http://www-rohan.sdsu.edu/dept/afras

## Faculty

Emeritus: Chambers, Cornwell, Kornweibel, Weber
Chair: Toombs
Associate Professors: Alkebulan, Nesbitt, Toombs
Assistant Professor: Alameen-Shavers
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, 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; Humanities 350; Political Science 364; Religious Studies 328*. Study abroad is required.

Diaspora Studies: Africana Studies 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]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 120. Composition (3) [GE]

Prerequisites: Satisfaction of the English Placement Test and Writing Competency requirements. (See the Graduation Requirements section of catalog.) Proof of completion of prerequisites required: Copy of EPT or competency scores or verification of exemption; proof of credit (Cr) in Rhetoric and Writing Studies 92.

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 American Indian Studies 120 or Chicana and Chicano Studies 111B or English 100 or Linguistics 100 or Rhetoric and Writing Studies 100 or 101.

## 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) [AI]

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 English Placement Test and Writing Competency requirement and Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or English 100 or Linguistics 100 or Rhetoric and Writing Studies 100 or 101. 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 Chicana and Chicano Studies 200, English 200, Linguistics 200, or Rhetoric and Writing Studies 200.

## AFRAS 240. Africana Intellectual Thought (3) [GE]

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]

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 320. Political Economy of African Diaspora (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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)

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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)

Structure and functions of the Black family in contemporary American society.

## AFRAS 332. Black Women: Myth and Reality (3)

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

Images of Black women in America and how those images have been distorted.

## AFRAS 341. Cultural Patterns and African American

 Identity (3) [GE]Prerequisite: Africana Studies 101 or completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

Impact of social institutions on African American identity and cultural patterns.

## AFRAS 351. Black Religions and Spirituality (3)

(Same course as Religious Studies 351)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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 360. Communications and Community Action (3)

Prerequisite: Completion of the General Education requirement in Communication and Critical Thinking, I.1., Oral Communication.

Application of the basic theories of communication through field projects. Study of the communication problems that exist between sociopolitical groups and the media.

## AFRAS 363. Sociocultural Analysis of Black Languages (3)

## (Same course as Linguistics 363)

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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)Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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)

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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 twentyfirst centuries.

## AFRAS 380. Blacks in the American Justice System (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

Interpretation and application of constitutional principles and judicia decisions to political and social problems faced by Afro-Americans.

## AFRAS 385. African American Music (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences

Major social science literature of international Black urban experience. Behavior, culture, and oppressions unique to urban environment.

## AFRAS 422. Modern Civil Rights Movement (3)

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)

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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)

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Conceptual framework of African history and a comparative study of Afro-American institutions.

## AFRAS 471. Africana History (3)

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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)

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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)

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C.; Humanities.

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 <br> In the College of Arts and Letters 

## OFFICE: Arts and Letters 331

TELEPHONE: 619-594-6991 / FAX: 619-594-2646

## Faculty

Emeritus: Kilpatrick
Chair: Kamper
Professor: Field
Associate Professor: Kamper
Adjunct: Cayleff, Colston, Connolly, Cooper, Garrett,
Ortiz, Reinholtz, Robinson-Zanartu, Spilde

## 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. Career opportunities for graduates include jobs in business, education, government, politics, social sciences, and health and human services. Students may also find positions in programs and institutions located on local Indian reservations. Federal agencies also seek people with knowledge about and experience with American Indian people and their culture. Agencies include the Bureau of Indian Affairs, the Indian Health Services, the Bureau of Land Management, and the U.S. Forestry 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 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

## 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, 370, 430, 435, 440, 451, 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]

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 English Placement Test and Writing Competency requirements. (See the Graduation Requirements section of catalog.) Proof of completion of prerequisite required: Copy of EPT or competency scores or verification of exemption; proof of credit (Cr) in Rhetoric and Writing Studies 92.

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 English 100 or Linguistics 100 or Rhetoric and Writing Studies 100 or 101.

## AMIND 140. U.S. History from an American Indian Perspective to 1870 (3) [AI]

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) [AI]
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 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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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)

(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) (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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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]

Ethnographic film-making. Impact of movies and television on popular concepts of Indians. Films viewed in class.

AMIND 440. American Indian History (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Historical analysis of Indian-White contact. Emphasis on the impact of historical events upon the various cultures.

## AMIND 451. American Indian Identity (3) [GE]

(Same course as Anthropology 451)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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] (Same course as Anthropology 460 and Linguistics 460)

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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]
Prerequisites: American Indian Studies 110 and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences.

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)

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 

## In the College of Arts and Letters

## OFFICE: Arts and Letters 448

TELEPHONE: 619-594-5527 / FAX: 619-594-1150
E-MAIL: anthro@mail.sdsu.edu
http://anthropology.sdsu.edu

## Faculty

Emeritus: Ball, Gamble, Greenfeld, Henry, Himes, Leach, Lippold,
Moore, Pendleton, Rohrl, Rollefson, Watson, Whitney
Chair: Conway
Professors: Mallios, Pérez, Sobo
Associate Professors: Braje, Conway, Lauer, Mayes, Riley

## 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 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.

## 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 $C$ or higher.

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 348, 360, 495, 505, $508,520,531,532 ; 499$ 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 (which will also satisfy three units of the General Education requirement in IV.A., B., or C.): American Indian Studies 420, Biology 315, 326, Chicana and Chicano Studies 301, Geography 312, History 406, 441, Philosophy 330, 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. Note: Cannot be used for General Education in combination with Geography 101 or 103.
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 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 <br> (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)

Prerequisite: Anthropology 101
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 348. Historical Archaeology (3) [GE]

Prerequisites: Anthropology 102 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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: Open only to upper division students who have completed the General Education requirement in Foundations of Learning II.C., Humanities.

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]

Prerequisites: Anthropology 102 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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] <br> (Same course as Sustainability 353)

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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 410. Language in Culture (3) [GE]

Prerequisites: Anthropology 102, and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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]

Prerequisites: Anthropology 102, and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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]

Prerequisites: Anthropology 102, and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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]Prerequisites: Anthropology 102, and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors

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]

Prerequisites: Anthropology 102, and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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 451. American Indian Identity (3) [GE]

(Same course as American Indian Studies 451)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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]

(Same course as American Indian Studies 460 and Linguistics 460)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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 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) <br> 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 crosscultural 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 540. Contemporary Cultures of Mesoamerica (3)

Prerequisite: Anthropology 303.
Utilizing ethnographic data to explore growth shifts in development of contemporary cultures of Mesoamerica from precontact to today. Countries may include Mexico, Belize, Costa Rica, El Salvador, Guatemala, Nicaragua, and Panama

## 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. See Class Schedule for specific content. May be repeated with new content. Maximum credit six units.

## ANTH 583. Topical Anthropology (3) <br> 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. See Class Schedule for specific content. May be repeated with new 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.


## Arabic

## 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
http://www-rohan.sdsu.edu/dept/linguist/index.html

## Faculty

Chair: Osman
Professor: Osman
Lecturer: El Cheddadi
Offered by the Center for Islamic and Arabic Studies Minor in Islamic and Arabic studies.

## Offered by International Business

Major in international business, with emphasis in Arabic.

## Offered by Social Science

Major in social science, with emphasis in Islamic and Arabic studies.

## Islamic and Arabic Studies Minor

(Minor Code: 22159) (SIMS Code: 115102)
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 <br> 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.
Prerequisites: Arabic 202; and completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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.
Prerequisites: Arabic 301; and completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Continuation of Arabic 301. More advanced writing and longer expository texts. Reading modern and classical texts.

## ARAB 330. Arabic Culture (3) [GE]

Prerequisites: Upper division standing; and completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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.
Prerequisites: Arabic 202; and completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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 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.


Art

## In the College of Professional Studies and Fine Arts

## OFFICE: Art 505

TELEPHONE: 619-594-6511 / FAX: 619-594-1217

## E-MAIL: artinfo@mail.sdsu.edu

## http://www.sdsu.edu/art

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: Berg, Cooling, Dominguez, Dumlao, Esser, Fisch, Hayakawa, Hunter, Johnson, Maruyama, Merritt, Miller, Moaney, Nelson, Orth, Perczel, Ray, Rigby, Roberts-Fields, Rogers, Shirk, Wallace
Director: Nakamura (Interim)
Professors: Berelowitz, Burkett, Nakamura, Ollman, Yapelli
Associate Professors: Cué Couttolenc, Hebert, Keely, Sherman, Siprut, Stringfellow
Assistant Professors: Castro Arias, Higgins, Ozkal, Struble
Lecturers: Benzel, Burgess, Carlson, Fobes, Hewitt, Kwon, Luera,
Matzigkeit, Palese, Papac, Prior, Shigley, Trepchina, 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 design.
Emphasis in multimedia.
Emphasis in painting and printmaking.
Emphasis in sculpture.
Teaching major in art 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, jewelry/metalwork, and fiber arts; art history; studio arts; graphic design; interior design; 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 design have a preprofessional orientation supplemented by a strong liberal arts background. Interior design 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, jewelry/metalwork, fiber arts, and textile design 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

(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 or higher: Art 100, 101, 258, and
259. These courses cannot be taken for credit/no credit (Cr/NC);
b. Have a cumulative GPA of 2.50 or higher;
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 or higher 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, 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 or higher: 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 2.50 or higher;
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, 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 $C$ or higher and cannot be taken for credit/no credit (Cr/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, 435; 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, 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 or higher: 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 2.50 or higher;
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, 258, 259, six units selected from Art 216, 220, 223, 231, and six units of art electives. Art 100, 101, 103, 104, 258, and 259 must be completed with a grade of C or higher 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 $(\mathrm{W})$ 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, six additional units in one of the areas; six units of art electives; and six units of art history (Art 371, 557 through 578, and 593).

Fiber: Art 435, 436, 535, 536
Metal: Art 331, 431, 432, 531, 532
Clay: Art 325, 326, 425, 525, 526
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 or higher: 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 3.00 or higher;
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, 241, 242, 258, 259 and six units of lower division art electives (Art 240 recommended). Art 100, 101, 103, 104, 258, and 259 must be completed with a grade of C or higher 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 441, 442, 450, 454; six units selected from Art 445B, 445C, 541, 542, 545; six units of upper division art electives; six units of art history (Art 371, 557 through 578, and 593); Art 577 recommended.

## Emphasis in Interior Design <br> (Major Code: 02031) (SIMS Code: 660565)

Impacted Program. The interior 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 interior design emphasis, students must meet the following criteria:
a. Complete with a grade of C or higher: 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 2.50 or higher;
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, 148, 249, 250, 251, 258, 259; and three units of lower division art electives. Art 100, 101, 103, 104, 258, and 259 must be completed with a grade of C or higher and cannot be taken for credit/no credit (Cr /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 $(\mathrm{W})$ 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, 557 through 578, and 593; Art 577 recommended).

## Emphasis in Multimedia

(Major Code: 06991) (SIMS Code: 660560)
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 or higher: 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 2.75 or higher;
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, 240, 242, 258, 259; and six units of art electives, excluding Art 157. Art 100, 101, 103, 104, 258, and 259 must be completed with a grade of C or higher 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 Art 340 and 344; six units of art history (Art 371, 557 through 578, and 593); three units selected from Art 342A, 346, 348; nine units selected from Art 342A, 342B, 343, 346, 348, 407, 408, 440, 442, 444, 445B, 446, 448, 524, 540, 544, 545; six units of art electives (may include Professional Studies and Fine Arts 330).

## Emphasis in Painting and Printmaking <br> (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 or higher: 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 2.50 or higher;
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, 240, 258, 259; three units selected from Art 102, 203, 210, 216; three lower division art electives. Art 100, 101, 103, 104, 258, and 259 must be completed with a grade of C or higher 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 33 upper division units in art to include six units of art history (Art 371, 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, 511; 12 units selected from Art 344, 407, 408, 410, 411, 416, 443, 446, 506; six units of upper division art electives.

## Emphasis in Sculpture <br> (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 or higher: 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 2.50 or higher;
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, 216, 220, 258, 259; and six units of lower division art electives. Art 100, 101, 103, 104, 258, and 259 must be completed with a grade of $C$ or higher 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 $(\mathrm{W})$ 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, 557 through 578, and 593).

## Art Major

In Partial 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 or higher: 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 2.50 or higher;
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 lower division 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 $C$ or higher and cannot be taken for credit/no credit (Cr/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; three units of non-western art history selected from Art 561, 564, 565; six 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, 411.
Sequence 3. 3D Arts: Art 323, 325, 326, 331, 416, 423, 425, 431, 432, 435, 436, 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, 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 148. Visual Presentation (3) <br> 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 217. Figurative Sculpture I (3)

Six hours
Prerequisite: Art 103.
Creative experimentation with sculptural forms from the human figure.

## ART 220. Design in Crafts (3)

Six hours.
Prerequisite: Art 103.
Visual and structural form in crafts.

## 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, 258, 259. Computer proficiency required with working knowledge of vector graphics software consistent with current industry standards. Proof of completion of prerequisites required: Copy of transcript.

Principles of two-dimensional design applied to graphic form, including form/counter form, contrast, progression, and sequence.

## ART 242. Typography I (3)

Six hours.
Prerequisites: Grade of C (2.0) or better in Art 100, 101, 103, 104, 258, 259. Computer proficiency required with working knowledge of vector graphics and page layout software consistent with current industry standards. Proof of completion of prerequisites required: Copy of transcript.

Fundamentals of typography including history, theory, and practice with emphasis on study of letterforms and type design; principles of two-dimensional design and hierarchy applied to basic typographic layout.

## 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.

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## 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. Asian Art (3)

Arts of Asian countries including China, India, and Japan from prehistoric to pre-modern times. Role of religious belief and state ideology in shaping visual characteristics of regional cultures in Asia.

## 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.

## UPPER DIVISION COURSES

(Intended for Undergraduates)
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) <br> 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 nonferrous metals.

## ART 339A. Software for Graphic Design I (1)

Two hours.
Prerequisites: Art 103, 104, and major standing.
Vector, page layout, and image editing software consistent with current industry standards within graphic design practice.

## ART 339B. Software for Graphic Design II (1) <br> Two hours.

Prerequisite: Art 339A.
Web design software consistent with current industry standards within graphic design practice.

## ART 339C. Software for Graphic Design III (1)

Two hours.
Prerequisite: Art 339A.
Motion graphics software consistent with current industry standards within graphic design practice.

## 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) <br> Six hours

Prerequisites: Grade of C (2.0) or better in Art 241, 242, 345. Computer proficiency required with working knowledge of vector graphics and page layout software consistent with current industry standards. Proof of completion of prerequisites required: Copy of transcript.

Graphic form with emphasis on visual translation techniques, visual metaphor, signs and symbols.

## ART 342A. Typography II (3)

Six hours.
Prerequisites: Grade of $C$ (2.0) or better in Art 241, 242, 345. Computer proficiency required with working knowledge of vector graphics and page layout software consistent with current industry standards. Proof of completion of prerequisites required: Copy of transcript.

Typographic layout and page systems including theories of visual organization, proportion, and grids with emphasis on expression and communication.

## ART 342B. Letterpress (3)

Six hours.
Prerequisite: Grade of C (2.0) or better in Art 210 or 242
History, technology, and process of relief printing using moveable type and photopolymer plates to create individual and collaborative page 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. (Formerly numbered Art 344A.)

## 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 threedimensional objects and spatial environments.

## ART 352. Methods and Materials of Interior Design (3)

Prerequisite: Art 451
Topics in successful professional practice including codes, legal liabilities, contractual agreements, project management. Lectures in field settings illustrate methods and materials of installation and explore environmental systems.

## ART 357. World Art in Contemporary Life (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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 385. Art Education History and Practice (3)

Six hours.
Prerequisites: Art 103, 104, 258, 259.
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. For art majors interested in pursuing the single subject teaching credential.

## 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 408. Color Photography (3)

Six hours
Prerequisites: Art 100, 101, and 103.
Color photography as a fine art medium, including color theory, camera exposure controls, image processing techniques, electronic flash, and lighting techniques. 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 411. Lithography (3)

Six hours.
Prerequisites: Art 100 and 101. Recommended: Art 210.
Creative lithography-stone and plate planographic process.
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 435. Fiber Construction I (3)

Six hours.
Prerequisite: Art 103. Recommended: Art 220.
Textile structures with emphasis on nonloom techniques. Maximum credit six units.

## ART 436. Fiber Surface Design I (3)

Six hours.
Prerequisite: Art 103. Recommended: Art 220.
Application of design for the textile surface, using a broad variety of media and processes appropriate for both the individual designer and commercial reproduction. Media include stencil, block, silkscreen, batik, and tie-dye. 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. Computer proficiency required with working knowledge of vector graphics, page layout, digital image editing, web design, and motion graphics software consistent with current industry standards. 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. Computer proficiency required with working knowledge of vector graphics, page layout, digital image editing, web design, and motion graphics software consistent with current industry standards. 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. (Formerly numbered Art 344B.)

## ART 445A. Professional Practice in Art and Design (1) Cr/NC <br> 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. Computer proficiency required with working knowledge of vector graphics, page layout, digital image editing, web design, and motion graphics software consistent with current industry standards. 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) <br> 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. Computer proficiency required with working knowledge of vector graphics, page layout, digital image editing, web design, and motion graphics software consistent with current industry standards. 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. Computer proficiency required with working knowledge of vector graphics, page layout, digital image editing, web design, and motion graphics software consistent with current industry standards. 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 (3) Cr/NC

Prerequisite: Any 400-level art course.
Field experience with practicing professional artists and designers. Maximum credit six units.

## ART 453. Mixed Use Interior Design (3) <br> Six hours.

Prerequisites: Art 249, 250, 251.
Materials and techniques of nonresidential space planning Estimating, specification writing, contractual agreements, record keeping, budgets, and project supervision. Required field trips to professional offices, studios, and showrooms.

## ART 454. Environmental Graphic Design (3)

Six hours.
Prerequisites: Grade of C (2.0) or better in Art 341, 342A. Computer proficiency required with working knowledge of vector graphics, page layout, digital image editing, web design, and motion graphics software consistent with current industry standards. 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 498. Senior Project (3) <br> Nine hours for 498A.

Prerequisite: Consent of instructor.
Investigation in art. Formal presentation of project.
A. Studio project

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.
Prerequisites: One year of 400-level studio art coursework and consent of instructor.

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 511. Advanced Lithography (3)

Six hours.
Prerequisite: Art 411.
Advanced creative lithography printmaking in color. Emphasis on fine print quality in color process and color technology unique to this medium. Maximum credit six units.

## 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 or 217.
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). Small-scale 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 535. Fiber Construction II (3)

Six hours.
Prerequisite: Art 435.
Advanced study in nonloom techniques. Techniques to include: looping, braiding, plaiting, and special fabricating techniques. Experimentation with new man-made fibers and with synthetic commercial dyes. Maximum credit six units.

## ART 536. Fiber Surface Design II (3)

Six hours.
Prerequisite: Art 436.
Application of design for the textile surface, appropriate for both the individual designer and commercial reproduction. Maximum credit six units.

## ART 540. Advanced Photographic Imagery (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) <br> Six hours.

Prerequisites: Grade of $C$ (2.0) or better in two of the following: Art 441, 442, 450, 454. Computer proficiency required with working knowledge of vector graphics, page layout, digital image editing, web design, and motion graphics software consistent with current industry standards. 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.
Prerequisites: Grade of C (2.0) or better in Art 442. Computer proficiency required with working knowledge of vector graphics, page layout, digital image editing, web design, and motion graphics software consistent with current industry standards. 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. Computer proficiency required with working knowledge of vector graphics, page layout, digital image editing, web design, and motion graphics software consistent with current industry standards. 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. Environmental Theory (3)

Prerequisite: Art 247 or 347.
Survey of alternative solutions to the problem of design of the physical environment.

## ART 552. Work Environment Interior Design (3)

Six hours.
Prerequisite: Art 453.
Projects in architectural interiors involving the use and perception of enclosed spaces. Space planning systems analysis. 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 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 561. Mesoamerican Art: Olmecs to Aztecs (3)
Prerequisite: Art 259.
Art and architecture of Mesoamerica from Olmecs to Aztecs. Role of art as transmitter of cultural information and world view. Continuities and ideologies that characterize Mesoamerican civilizations. Field trips required.

## ART 563. Modern Mexican Art (3)

Prerequisites: Art 258 and 259.
Mexican art from 1900 to present. Emphasis on images created after Mexican Revolution (1910-1920) in murals, painting, architecture, prints, photography, film, conceptual art. Construction of national identity, debate between national/international currents in art and role of public art. Field trip.

## ART 564. Art of China (3)

Prerequisite: Art 258 or 259 or 263.
History of Chinese art from prehistoric times through the Ching Dynasty.

## ART 565. Art of Japan (3)

Prerequisite: Art 258 or 259 or 263.
History of Japanese art from prehistoric times to the Meiji Restoration.

## ART 566. History of Japanese Painting Tenth to Twentieth

 Centuries (3)Prerequisite: Art 258 or 259 or 263.
History of Japanese painting from tenth to twentieth centuries, emphasizing art from three social groups: aristocrats, warriors, and merchants. Analysis of motifs, iconography, and styles of art schools developed during these periods, reinforced by social history.

## 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 571A. Modern Art of Latin America (3)

Prerequisites: Art 258 and 259.
Historical, political, and social contexts of leading artists and artistic movements in Latin America from late-nineteenth to mid-twentieth century. Field trips required.

## 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)

Prerequisite: 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.

GRADUATE COURSES
Refer to the Graduate Bulletin.


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## Arts and Letters

OFFICE: Arts and Letters 600
TELEPHONE: 619-594-5028
FAX: 619-594-6281
http://cal.sdsu.edu

## Faculty

Faculty assigned to teach College of Arts and Letters courses (CAL) are drawn from departments within the college.

## 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 COURSE

## UPPER DIVISION COURSES (Intended for Undergraduates)

## 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.

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.


# Asian Studies 

## In the College of Arts and Letters

## OFFICE: Arts and Letters 473 <br> TELEPHONE: 619-594-0931 / FAX: 619-594-0257 <br> E-MAIL: mbolthou@mail.sdsu.edu <br> 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),
K. Hansen (Japanese), W. Hansen (Religious Studies),

Higurashi (Japanese), Hua (Women's Studies), Kitajima (Japanese), Li (Social Work), Pang (Teacher Education), Riley (Anthropology), Samraj (Linguistics), Timalsina (Religious Studies), Tsou (Geography), Varadarajan (Political Science), Wawrytko (Philosophy), Wong (Sociology and Dean, College of Arts and Letters), 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 Asian 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 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 27 upper division units in Asian Studies. Courses from other departments acceptable for the Asian Studies major include: Art 564^, 565^, 566^, Chinese 496, 499; Comparative Literature 451, 530^; History 420, 421, 422, 566, 567, 570, 574; Japanese 421^, 496, 499; Korean 321, 430; Philosophy 351, 353, 514*, 565, 575*; Political Science 362, 365, 575^; Religious Studies 338, 339, 345, 581*, 582*, 583*, 596*; Women's Studies 331.

Other Asian-content courses may be applied to the major with written approval of the undergraduate adviser.

Master Plan. A master plan of the courses taken to fulfill the major must be approved by the Asian Studies undergraduate adviser and filed with the Office of Advising and Evaluations.

* Acceptable when of relevant content.
$\wedge$ Indicates 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, 150; Chinese 101, 102, 201, 202; and one course selected from Anthropology 102, Chinese 100, 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. (32 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 <br> (SIMS Code: 111103)

Major. A minimum of 24 upper division units in Chinese studies to include History 567; Philosophy 351; Political Science 365; three units selected from Art 564, Religious Studies 340; three units selected from History 566, Political Science 362; and nine units selected from Asian Studies 499, Communication 496*, History 420, 421, 435*, Journalism and Media Studies 450*, Political Science 575, Religious Studies 338, 345.

## Track (b): Chinese Language <br> (SIMS Code: 111104)

Major. A minimum of 24 upper division units to include Chinese 301, 302; six units selected from History 567, Philosophy 351, Political Science 365; 12 units selected from Chinese 354, 431, 433, 434, 496*.

## * 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

## (SIMS Code: 111110)

The minor in Chinese studies consists of a minimum of 15 units to include three units of Asian Studies 150 or Chinese 100; History 567; Philosophy 351; Political Science 365; and three units selected from Art 564, History 566, Religious Studies 340, or 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 Art 565, 566, Asian Studies 451 [or Comparative Literature 451], 458, 459, 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 150. Understanding the Chinese World (3) [GE]

Traditions of Chinese civilization and their contemporary transformations. Chinese civilization through introductory modules on geography, language, religions, philosophies, arts, history, and politics of Chinese world.

## 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 <br> (Intended for Undergraduates)

## ASIAN 300. Asia's Global Future (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

Survey of contemporary Asia Pacific region and future prospects, politically, socially, and economically, as historically grounded in cultural and philosophical roots.

## ASIAN 310. Contemporary Issues in Asian-American

Communities (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

Diverse processes, economic, political, and cultural, that have shaped formation and continued growth of diasporan communities in Asia Pacific region. Historical origins and contemporary status of diasporan communities.

## ASIAN 320. Asian Environmental Issues (3) [GE]

Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.B. Social and Behavioral Sciences required for nonmajors.

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 421. Asian History Since 1600 (3) [GE]

(Same course as History 421)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors

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]

(Same course as History 422)
Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 451. Modern Asian Literature (3) [GE]

(Same course as Comparative Literature 451)
Prerequisites: Asian Studies 100 or 101 or Comparative Literature 270A or 270B or English 220; and completion of the General Education requirement in Foundations of Learning II.C. Humanities required for nonmajors.

Asian literatures from modern period of China, Japan, India Korea, Philippines, Vietnam, and others.
ASIAN 456. Contemporary Asian Film (3) [GE]
Two lectures and two hours of laboratory.
Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C. Humanities required for nonmajors.

Contemporary Asian cinema focused on aesthetic and cinematic aspects of film. Methodologies of cultural criticism that elaborate relationships between media, representation, ethnicity, and national identity.

## ASIAN 458. Asian Traditions (3) [GE]

Prerequisites: Six units of Asian-content courses or upper division standing, and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Social, cultural, economic, and political traditions of South, Southeast, and East Asia; how they functioned in theory and practice prior to twentieth century.

## ASIAN 459. Modern Asian Cultures (3) [GE]

Prerequisites: Six units of Asian-content courses or upper division standing, and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors

Interdisciplinary investigation of East and Southeast Asian countries and regions. Western colonialism to rise of Asia as an economic and political power; ethnicity in Asian politics and society; terrorism, leadership struggles, and secessionist movements in Indonesia, Burma, and the Philippines.

## ASIAN 460. Contemporary Issues in Filipino-American

 Communities (3) [GE]Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.B. Social and Behavioral Sciences required for nonmajors

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 490. Study Abroad in Asian Studies (3) [GE]

Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. 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 <br> (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: 619-594-1413
E-MAIL: astro@sciences.sdsu.edu
http://mintaka.sdsu.edu

## Faculty

Emeritus: Angione, Daub, Etzel, May, Nelson, Talbert
Chair: Shafter
Professors: Orosz, Sandquist, Shafter, Welsh
Associate Professors: Leonard, Quimby
Adjunct: Blanco, Rao-Sudhakar, Thompson, Young

## 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 participate in all phases of observational astronomical research.

Joint faculty and student research activities are principally in the area of observational astrophysics. These include ongoing investigations of cosmology, eclipsing binary stars, low mass stars, planetary nebulae, galactic clusters, exterior galaxies, and extrasolar planets.

Much of this work is done at the Mount Laguna Observatory operated by the university. Modern astronomical detectors are employed that produce digital data, which lend themselves to computer analysis. Faculty and students also participate in space astrophysics projects. The department has excellent computer facilities at the observatory and on-campus.

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 electronic instrumentation. Many of our graduates find employment in industry, with astronomical observatories, or with government agencies or government contractors. These jobs support continuing research and include telescope operators, instrument makers, opticians, electronic technicians, programmers, image analysts, and laboratory technicians. Some of our graduates pursue advanced degrees.

Employment opportunities for astronomers who have advanced degrees include positions in colleges and universities, in national observatories and government laboratories, in 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: Astronomy 510, 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 541; 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 301, 310, 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.

[^6]
## 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 Entry-Level Mathematics 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 301. Cosmology and Gravitational Collapse (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II. A.1. Physical Sciences.

Einstein's theory of general relativity applied to problems of gravitational collapse (stellar evolution, neutron stars, black holes) and cosmology (origin and evolution of the universe).

## 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)

Prerequisite: Astronomy 201
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: Credit or concurrent registration in Mathematics 342A and Physics 354

Radiative transfer theory, atmospheres of stars and the emergent spectrum, interior structure and evolution of stars, stellar pulsations.

## 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)

Prerequisite: Astronomy 498A
Six hours of laboratory. 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 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 http://www.bio.sdsu.edu

## Faculty

Emeritus: Alexander, Alfred, Archibald, Atkins, Avila, Barnett, Baxter, Breindl, Carmichael, Carpenter, Chen, Clark, Collier, B., Collier, G., Cox, Dexter, Diehl, Dowler, Ebert, Etheridge, Fisher, Ford, Franklin, Frey, Futch, Gottlieb, Hanscom, Hemmingsen, Huffman, Hunsaker, Hurlbert, Johnson, A., Johnson, K., Kelly, Krekorian, Krisans, Monroe, Neel, Norland, Paolini, P., Parsons, Perrault, Phleger, Plymale, Ratty, Rinehart, Sabbadini, Shepard, Tsoukas, Van Steenbergen, Wedberg, Zedler, J., Zedler, P., Zyskind

## Chair: Reeder

Vice Chair: Bohonak
Professors: Anderson, Bernstein, Berta, Bizzoco, Bohonak, Buono, Burns, Deutschman, Doran, Edwards, Glembotski, Harris, Hedin, Hovel, Kelley, Lipson, Maloy, McClenaghan, McGuire, Oechel, Pozos, Reeder, Rohwer, Segall, Simpson, Sussman, Welter, Williams, Zeller
Associate Professors: Clark, Dinsdale, Feuer, Hentschel, Lai, Lewison, Waters, Wolkowicz, Zayas
Assistant Professor: Long
Lecturers: 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 evolution and systematics.
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 and public health microbiology.
Program of study in biology in preparation for the single subject teaching credential in science.
Minor in biology.
Certificate in biotechnology.
Certificate in preprofessional health preparation.

## 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 plant and animal sciences, marine sciences, genetics and physiology, ecology, molecular biology, microbiology, immunology, endocrinology, entomology, evolution, and systematics. Formal programs of study within the major include Emphases in Cell and Molecular Biology, Ecology, Evolution and Systematics, 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 and Public Health Microbiology prepares students to become, after a postgraduate internship, licensed medical technologists or certified public health microbiologists.

## 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 2.70 and a grade of C or higher: Biology 203, 203L, 204, 204L, 215; Chemistry 200, 201, 232, 232L; Mathematics 124; and Physics 180A, 180B, 182A, 182B. These courses cannot be taken for credit/no credit (Cr/NC);
b. Have a cumulative GPA of 2.60 or higher;

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.

## 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 prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a minimum GPA of 2.70 and a grade of C or higher 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 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 352, 354, 366, 366L, and Chemistry 365. 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, 460, 512, 514, 515, 516A, 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 prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a minimum GPA of 2.70 and a grade of $C$ or higher in each class.

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 352, 354, 366, 366L, and Chemistry 365. Elective courses include all upper division biology courses numbered 350 and above, 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, 460, 512, 514, 515, 516A, 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 prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a minimum GPA of 2.70 and a grade of C or higher in each class.

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, 352, 354, 366, 366L, 567, 567L or 562, Chemistry 365. The remaining units must be selected from Biology and Chemistry 496 and/or 596 (maximum 3 units), Biology 497 and 499 and/or Chemistry 498 (maximum 3 units), Biology 480, 490, 510, 511, 528, 549, 554, 556, 557, 562, 567L, 568 [or Bioinformatics and Medical Informatics 568], 570, 575, 576, 584, 485 or 585, 589, 590, and Chemistry 432, 432L. At least one course must be an organismal level course. Approval of the Emphasis in Cellular and Molecular Biology adviser is required for credit in Biology 497, Chemistry 498, Biology or Chemistry 496, 499, 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 prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a minimum GPA of 2.70 and a grade of C or higher in each class.

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 352, 354, 354L, 366, 366L, Chemistry 365, and at least 15 units of electives selected from Biology 496 and/or 596 (maximum 3 units), 497 and 499 (maximum 3 units), 490, 508, 509, 512, 514, 516A, 516B, 517, 518, 526, 527, 527L, 528, 535, 538 [or Environmental Science 538], 540, 542, 544 [or Environmental Science 544], 560, 562, 597A. At least one of the above electives must be a laboratory course. The remaining units must include an organismal level course selected from Biology 458, 460, 512, 514, 515, 516A, 523, 524, 525, 526, 528,

530, 531, 535. Other electives include all biology courses numbered 350 and above (except Biology 452), and all upper division chemistry courses (except Chemistry 300, 308, 497, 499, 560). Approval of the Emphasis in Ecology adviser is required for credit in Biology 496, 497, 499, 596, and other courses not listed above to be included in the 15 units of 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 Evolution and Systematics <br> (SIMS Code: 771435)

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 prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a minimum GPA of 2.70 and a grade of C or higher in each class.

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 352, 354, 366, 366L, 509, Chemistry 365, and at least 12 units of electives selected from Biology 496 and/or 596 (maximum 3 units), 497 and 499 (maximum 3 units), 458, 460, 490, 508, 510, 511, 512, $515,518,523,524,525,526,527,527 \mathrm{~L}, 528,530,531,568$ [or Bioinformatics and Medical Informatics 568], 576. Two of the above electives must be laboratory courses, one of which must be an organismal level course selected from Biology 458, 460, 512, 515, 523, $524,525,526,528,530,531$. Other electives include all biology courses numbered 350 and above (except Biology 452), and all upper division chemistry courses (except Chemistry 300, 308, 497, 499, 560). Approval of the Emphasis in Evolution and Systematics adviser is required for credit in Biology 496, 497, 499, 596, and other courses not listed above to be included in the 12 units of evolution and systematics 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 prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a minimum GPA of 2.70 and a grade of C or higher in each class.

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 352, 354, 366, 366L, Chemistry 365, and at least 15 units of electives selected from Biology 496 and/or 596 (maximum 3 units), 497 and 499 (maximum 3 units), 490, 512, 514, 515, 516A, 516B, 517, 518, 542. At
least two of the above electives must be laboratory courses, at least one of which must be one of the organismal courses Biology 512, $514,515,516 A$. The remaining units must be selected from biology courses numbered 350 and above (except Biology 452) and all upper division chemistry courses (except Chemistry 300, 308, 497, 499, 560). Approval of the Emphasis in Marine Biology adviser is required for credit in Biology 496, 497, 499, 596, and other courses not listed above to be included in the 15 units of 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 prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a minimum GPA of 2.70 and a grade of C or higher in each class.

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 352, 354, 366, 366L, Chemistry 365, and at least 15 units of electives selected from Biology 496 and/or 596 (maximum 3 units), 497 and 499 (maximum 3 units), 490; and 515, 516A, 526 (invertebrate group), $512,518,523,524,525$ (vertebrate group), 508, 509, 510, 511, 527, $527 \mathrm{~L}, 540,560,576$ (general zoology group). At least three units must be selected from each of the three groups. Two or more of the above electives must be laboratory courses, at least one of which must be an organismal level course selected from Biology 512, 515, 516A, 523, 524, 525, 526. The remaining units must be selected from biology courses numbered 350 and above (except Biology 452), and all upper division chemistry courses (except Chemistry 300, 308, 497, 499, 560). Approval of the Emphasis in Zoology adviser is required for credit in Biology 496, 497, 499, 596, and other courses not listed above to be included in the 15 units of 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 prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a minimum GPA of 2.70 and a grade of $C$ or higher 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. 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, $352,354,366,366 \mathrm{~L}, 485$ or 585,528 or 584, 549, 567L, Chemistry 365.

All courses not included above must have the prior approval of the Microbiology adviser and 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 prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a minimum GPA of 2.70 and a grade of C or higher in each class.

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, 352, 354, 366, 366L, 485 or 585, 528 or 567L, 549, 584, Chemistry 365, and at least five to six units of electives selected from Biology and Chemistry 496 and 596 (maximum 3 units), Biology 497 and 499 (maximum 3 units), Biology 480, 490, 528, 554, 556, 557, 562, 567, 567L, 568 [or Bioinformatics and Medical Informatics 568], 585, 590, Chemistry 432, 432L. Prior approval of the microbiology adviser is required for credit in Biology 490, 496, 497, 499, 596, Chemistry 496, 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 and <br> Public Health Microbiology <br> (SIMS Code: 771450)

The emphasis in clinical laboratory science and public health microbiology 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 prerequisite courses (excluding Chemistry 251) may not be taken $\mathrm{Cr} / \mathrm{NC}$ and must be completed with a minimum GPA of 2.70 and a grade of $C$ or higher in each class.

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 at least 33 units from Biology 350, 352, 354, 366, 366L, 480, 485, 549, 584, Chemistry 365 , and Biology 528 or 567L with approval of the microbiology adviser. The remaining units to be selected from Biology 528, 554, 556, 557, $567 \mathrm{~L}, 590$, Chemistry 432, 432L. To be included in this major courses not listed above must have the prior approval of the Microbiology adviser and 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 B 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 $458,460,515,523,524,525,526,530$ or 531 (it is recommended that Biology 497 or 499 be taken as electives for the major); (2) earning a B 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 and still satisfy SSTC/CSET waiver requirements; however, Biology 336 will not count as an elective 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, 326, 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 342, 350, 352, 366, 366L, 480, 510, 511, 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, $525,526,527,527 \mathrm{~L}, 528,531,540,542,544$ [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 352, 508, 509, 510, 511, 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 $204,204 \mathrm{~L}, 458$ or 460 or 530 or 531 or 535 . At least $8-9$ units of the following electives (to total 12 upper division units): Biology 326, 458, 460, 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], 594, and three electives selected from Biology 510, 549, 554, 570, 575, 584, 585, 590, Chemistry 563, 564. Prerequisite and certificate courses may be utilized in the biology, chemistry, and microbiology majors and minors as appropriate.

## Preprofessional Health Preparation Certificate

## (Offered only in the College of Extended Studies)

## (SIMS Code: 552862)

A significant amount of preparation is needed to enter professional health programs to include medical, dental, veterinary, pharmacy, physician assistant, optometry, podiatry, and other schools. The specific coursework necessary varies by career and by school. Relevant extracurricular experience is expected, and letters of recommendation must be coordinated. This certificate offers non-degree seeking students the opportunity to complete the coursework necessary for these careers, and obtain guidance and assistance from staff members solely dedicated to preprofessional health preparation.

## Admission Requirements

To be admitted to the certificate program, students must have earned a bachelor's degree and demonstrate by previous coursework and/or work experience evidence of potential for excelling in one of the health programs this certificate covers: allied health fields, chiropractic medicine, dentistry, medicine, optometry, pharmacy, physician assistant, podiatry, veterinary medicine. Not covered in this program are nursing, occupational therapy, physical therapy.

The SDSU Preprofessional Health Advising office is responsible for the coordination of the certificate program in conjunction with the Department of Biology and the College of Extended Studies. Applications may be submitted prior to entering the program or before the completion of nine semester units of coursework that would be applicable to the certificate. Previous courses taken at SDSU will be considered when developing a personalized course plan after admission.

Students are required to submit an Open University registration form each semester to the College of Extended Studies.

## Certificate Requirements

Students must complete a minimum of 12 units of new coursework (subsequent to the bachelor's degree) at SDSU with a cumulative grade point average of 3.0 or better. Each course must be completed with a grade of C (2.0) or better. Specific course requirements will be approved by the preprofessional health adviser based on the intended program and previous coursework. Approved courses may include Accountancy 201, Biology 203, 203L, 204, 204L, 212, 215, 248, 249, 250A, 250B, 250C, 261, 336, 350, 352, 366, 366L, 436, 485, 554, 576, 585, 590, Chemistry 200, 201, 232, 232L, 365, 432, 432L, Economics 101, Mathematics 122 or 124 (or Mathematics 150 and 151), Philosophy 329, 330, Physics 180A and 182A; 180B and 182B; or 195, 195L, 196, 196L, 197, 197L, Psychology 101, 456, Public Health 305, 362, Rhetoric and Writing Studies 100, 200, 503W or 508W, Sociology 101, Spanish 101.

Completion of the certificate also requires a personal statement, application to a professional health program, and associated application materials. A fee is required for the application committee process. This fee is in addition to tuition and registration fees. Students must petition the Preprofessional Health Advising office for the certificate upon completion of all requirements.

## 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, 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, 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: Chemistry 200 and satisfaction of the English Placement Test 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: Chemistry 200 and satisfaction of the English Placement Test requirement. Concurrent registration or credit with a grade of C or better in Biology 203.

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 English Placement Test 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: Satisfaction of the English Placement Test requirement. Concurrent registration or credit with a grade of C or better in Biology 204. 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 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) <br> Six hours of laboratory.

Prerequisites: Credit or concurrent registration with a grade of $C$ 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 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, 203L or 204, 204L and Mathematics 122, 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; 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:

 Application Strategies (1) Cr/NCTwo 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) Cr/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 277. Medical Terminology (2)
Prerequisite recommended: Biology 100 or 203 or 204.
Words and word components used in medical and allied medical practice translated, investigated, and applied.

## 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 <br> (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 <br> 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 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 326. Plants, Medicines, and Drugs (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.

Medicinal plants, toxic-poisonous plants, herbal medicines, psychoactive plants, preparation of medicines and mechanisms of action; current research results on medicinal plants and drugs used in diseases such as diabetes, cancer, and heart diseases. 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 342. Emerging Technologies in Human Health Care (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.

Present and emerging medical technologies to include basic science, potential for treating disease, and societal issues related to these technologies, utilizing regenerative medicine as a model. Not applicable to biological sciences majors.

## BIOL 348. Health Professions Internship (1-3)

Prerequisites: 3.0 overall GPA, completion of lower division writing competency requirement, and consent of instructor.

Internship in a health care setting; term paper required. Maximum credit three 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 352. Genetics and Evolution (3)

Two lectures and two hours of activity.
Prerequisites: Biology 203, 203L, 204, 204L, 215.
Principles of transmission genetics, population genetics, and evolution.
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. Biochemistry, Cell and Molecular Biology II (4)
Prerequisite: Chemistry 365. Limited to Biology and Microbiology majors, Biology minors, and Chemistry majors with Emphasis in Biochemistry, SIMS Codes: 771401-771452 and 772609.

Concepts of modern integrated molecular biology, cell biology, and biochemistry.

## 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 460. Economic Botany (3)

Two lectures and three hours of laboratory.
Prerequisites: Biology 203, 203L, 204, 204L
Plants of agricultural, economic, and historical importance Topics include basic plant morphology, anatomy, and taxonomy, plant genetics, agricultural breeding and propagation techniques, vegetables and fruits, spices and herbs, beverage plants, woods and plant fibers.

## 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 480L. Clinical Hematology Laboratory (1) <br> (Offered only in the College of Extended Studies)

## Three hours of laboratory.

Prerequisite: Credit or concurrent registration in Biology 480.
Laboratory techniques commonly used in modern clinical hematology laboratories. Improves access to highly competitive clinical laboratory sciences training programs.

## 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, Iymphocyte 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: Upper division standing with GPA of at least 3.20, four units of Biology 497 and/or 499, and approval of honors research program coordinator.

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 presented at an undergraduate research forum and/or 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) <br> Fifty hours of research per unit.

Prerequisites: Upper division status in good standing and consent of instructor.

Individual research project, supervised by faculty. Research course with research paper or other presentation of results. Maximum credit six units applicable to general biology major, three units to microbiology major, for any combination of Biology 497 and 499.

## BIOL 499. Special Study (1-3) <br> Fifty hours of activity per unit.

Prerequisites: Upper division status in good standing and consent of instructor.

Individual study, internship, other supervised laboratory or field project or experience. Credit involves 50 hour activity per unit per semester and a report. Maximum credit six units applicable to biology major, three units applicable to microbiology major, for any combination of Biology 497 and 499.

## 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 508. Coevolution (3)

Prerequisites: Biology 352 and 354.
Coevolution in interspecific interactions, like herbivory, predation, parasitism, competition, pollination, and mimicry.

## BIOL 509. Evolutionary Biology (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 511. Evolution of Development (3)

Prerequisites: Biology 352 and 366.
Dynamic relationship between regulatory functions that control development and the evolutionary process, and vice versa, illustrated with evidence derived from developmental, phylogenetic, paleontological, computational, and ecological research. Emphasis on genomic regulatory networks of transcriptional regulatory elements and cell-signaling pathways.

## 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 (4)
Two lectures and six 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 (4)

Two lectures and six 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 (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. 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 538. Environmental Policy and Regulations (3)

(Same course as Environmental Science 538)
Prerequisite: Biology 354.
History of biological conservation and environmental laws; regulations governing biological resources; role of biologists; environmental impact analysis, operation of regulatory and resource agencies; biologists as expert witnesses; wetland protection and mitigation, state heritage programs, role of nongovernmental agencies.

## 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) <br> 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 544L. Global Change Science Laboratory (2)
(Same course as Environmental Science 544L)
Six hours of laboratory.
Prerequisite: Biology 354.
Ecological methods in ecosystem and climate change science to include chemical analysis (of stable isotopes and elements) and meteorological measurements. Modeling, data interpretation, and presentations.

## 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 561. Radiation Biology (3)
Prerequisites: Biology 203, 203L, 204, 204L; Physics 180B, 182A, and 182B. Recommended: Biology 366.

Principles underlying radiological reactions of ionizing radiations. Effects of ionizing radiations at the biochemical, cell, organ, and organism levels.

## 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 594. Biotechnology Research Rounds (2) Cr/NC

Prerequisites: Biology 366 and credit or concurrent registration in Biology 567

Research methods in biotechnology community. Speakers from local biotechnology companies and research institutes discuss power and limitations of current research methods being applied to develop new therapeutics. Evaluation of approaches, results, and utility of these technologies. Not applicable to biology or microbiology majors.

## 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.
BIOL 597A. Univariate Statistical Methods in Biology (3)
Two lectures and three hours of laboratory.
Prerequisite: Biology 352 or 354 or 366.
Application of univariate statistical techniques in biological sciences.

GRADUATE COURSES
Refer to the Graduate Bulletin.

# Business Administration 

## In the College of Business Administration

## OFFICE: Education and Business Administration 448 TELEPHONE: 619-594-5828 / FAX: 619-594-7046 http://www.sdsu.edu/business

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 College of Business Administration.

## 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 College of Business Administration, 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 College of Business Administration, 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 College of Business Administration expects that all business students will make reasonable academic progress towards the degree. Business premajors who have completed major preparatory courses, 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.

## Business Passport

All majors in the College of Business Administration will be introduced to the Business Passport in Business Administration 310, and complete the Business Passport in the capstone course (Business Administration 404, 405, or 458). Contact the Business Advising Center (EBA-448), 619-594-5828, for more information.

## 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 College of Business Administration.

Upper Division: It is the policy of the San Diego State University College of Business Administration 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 College of Business Administration 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 or higher: 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 threeunit 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 ( $\mathrm{Cr} / \mathrm{NC}$ );
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 Business Advising Center (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)

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.

A minor is not required with this major.
Preparation for the Major. Complete with a grade of C or higher: 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. Forty 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; seven units selected from 400-level and 500-level courses in the College of Business Administration. 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 College of Business Administration, 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 Business Advising Center (EBA-448), 619-594-5828.

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 Business Advising Center (EBA-448) for admissions criteria and procedures.

## Business Administration Certificate (Imperial Valley Campus Only)

## (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) Cr/NC

Prerequisite: Member of College of Business Administration 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. (Formerly numbered Business Administration 100B.)

## 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: Management Information Systems 180. Approved upper division business major or another major approved by the College of Business Administration. Proof of completion of prerequisites 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) Cr/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 College of Business Administration. 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)

Prerequisites: Management Information Systems 180 for students with a major or minor in the College of Business Administration. Approved upper division business major, business minor, or another major approved by the College of Business Administration. For approved business majors, credit or concurrent registration in Business Administration 310. Proof of completion of prerequisites 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: Management Information Systems 180; Mathematics 120; Statistics 119 or Economics 201. Approved upper division business major, business minor, or another major approved by the College of Business Administration. 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: Management Information Systems 180. Approved upper division business major, business minor, or another major approved by the College of Business Administration. For approved business majors, credit or concurrent registration in Business Administration 310. Marketing majors must complete this course with a minimum grade of $C$ (2.0). 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 College of Business Honors Program.
Current issues affecting local, national, and global business environments. Maximum credit five units.

## B A 401. Business Internship (1) Cr/NC

Prerequisite: Approved upper division business major, business minor, or another major approved by the College of Business Administration.

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) Cr/NC

Prerequisite: Upper division standing in the College of Business Administration.

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 <br> 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. (Formerly numbered Management 458.)

## 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.

GRADUATE COURSES
Refer to the Graduate Bulletin.

## OFFICE: Geology/Mathematics/Computer Science 209 <br> TELEPHONE: 619-594-5595 / FAX: 619-594-4634 <br> E-MAIL: cheminfo@sdsu.edu <br> http://www.sci.sdsu.edu/chemistry <br> Certified by the American Chemical Society.

## Faculty

Emeritus: Abbott, Bennett, Chattield, Cobble, Dahms, Grubbs, Jensen,
Jones, Joseph, Landis, Lebherz, Mathewson, Metzger, O'Neal,
Richardson, Ring, Roeder, Stewart, Stumph, Walba, Woodson
Chair: Tong
Professors: Carrano, Cooksy, Grotjahn, Huxford, Tong
Associate Professors: Bergdahl, Cole, Harrison, Love, Pullman, Smith, van der Geer
Assistant Professors: Gustafson, Holland, Kalyuzhny, Purse
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 for the single subject teaching credential in science.
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.

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)

(SIMS Code: 772613 - Georgia)
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) <br> (SIMS Code: 772611 - Georgia)

Preparation for the Major. Chemistry 200, 201, 232, 232L, 251; 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

## (Major Code: 19051) (SIMS Code: 772612)

and Certificate of the American Chemical Society
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." Candidates who wish to graduate with 120 units must complete both American Institutions courses at the upper division level. 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." Candidates who wish to graduate with 120 units must complete both American Institutions courses at the upper division level. 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 $(\mathrm{W})$ 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 (Teaching Credential Only)

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." Candidates who wish to graduate with 120 units must complete one of 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. 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, 432L, 498 (1 unit), 520A, 550, 560; Astronomy 310; Geological Sciences 412; Physics 499 (History of Science and Technology).

## Additional Requirements for Subject Matter <br> 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.

## 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.

* Additional prerequisites in mathematics and physics required for these courses.


## Courses (СНем)

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) <br> 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 or better; or satisfaction of the Entry-Level Mathematics 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 $C$ 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.
Prerequisite: Knowledge of introductory chemistry as demonstrated by completion of Chemistry 100 with a grade of C or better; or satisfaction of the Entry-Level Mathematics 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 232. Organic Chemistry (3)
Prerequisites: Chemistry 201 with a grade of $C$ or better and credit or concurrent registration in Chemistry 232 L .

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 $C$ 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 IVC)

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. Biochemistry, Cell and Molecular Biology I (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.

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 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 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 410B; 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 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.

## CHEM 538. Polymer Science (3)

(Same course as Physics 538)
Prerequisites: Chemistry 200 or 202; and Chemistry 410B or
Physics 360 or Mechanical Engineering 350.
Structure, synthesis, physical properties, and utilities of polymers.

## 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. Not open to students with credit in Chemistry 361.

## 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. Not open to students with credit in Chemistry 361.

## 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. Environmental Chemistry (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.

## 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 

In the College of Arts and Letters

## OFFICE: Arts and Letters 348 <br> TELEPHONE: 619-594-6452

## Faculty

Emeritus: Griswold del Castillo, Rodriguez, Villarino
Chair: Iglesias Prieto
Professors: Hicks, Iglesias Prieto, Ortiz
Associate Professors: Del Castillo, González-Rivera, Ibarra
Assistant Professor: Hernández

## 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 a multi- and interdisciplinaryfield that takes as its focus of study Chicana/o-Mexicana/o, and 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 both a general knowledge of the history, cultures, and social life of Chicana/o-Mexicana/o communities over time and in comparative and global contexts, as well as 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 Chicana/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 federal, state, and local government; education; law; journalism; 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; they 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. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above before taking Chicana and Chicano Studies 396W 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 27 units selected from Chicana and Chicano Studies 301, 303, 306, 310, 320, 335 [or English 335], 340B, 350A, 350B, 355, 375, 380, 396W, 400, 405, 450, 480, 496, 497, 498, 499, 596, Women's Studies 512; and six units selected from Chicana and Chicano Studies 340A, 376, and 410.

## 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, and six units selected from Chicana and Chicano Studies 306, 310, 375, 376, 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, 458, 565; 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 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 458, 496, 565; 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.

## Language Requirement for the B.A. Degree in Liberal Arts and Sciences

Students electing the study of Náhuatl to fulfill the language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Chicana and Chicano Studies 201 or the equivalent level of competency. The usual sequence of coursework is Chicana and Chicano Studies 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 (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]

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 101. Elementary Náhuatl I (4) [GE]

Four lectures plus laboratory.
Introduction to basic Náhuatl vocabulary and grammar. Colonial and modern texts and translations in their cultural contexts. Not open to students with credit in Chicana and Chicano Studies 102 or 201.

## CCS 102. Elementary Náhuatl II (4) [GE]

Four lectures plus laboratory.
Prerequisite: Chicano and Chicana Studies 101.
Continuation of Elementary Náhuatl I. Language development through vocabulary and grammar. Reading colonial, modern texts, and translations. Conversational language development through cultural context. Not open to students with credit in Chicana and Chicano Studies 201.

## CCS 110. Introduction to Chicana and Chicano Studies (3)

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]

Prerequisites: Satisfaction of the English Placement Test and Writing Competency requirements. (See Graduation Requirements section of catalog.) Proof of completion of prerequisites required: Copy of EPT or competency scores or verification of exemption; or proof of credit ( Cr ) in Rhetoric and Writing Studies 92.

Training in written expression. English grammar and composition; the essay, the term paper. Chicana and Chicano Studies 111B is equivalent to Rhetoric and Writing Studies 100. Not open to students with credit in a higher-numbered composition course or Africana Studies 120 or American Indian Studies 120 or English 100 or Linguistics 100 or Rhetoric and Writing Studies 100 or 101.

## CCS 120A-120B. Chicana and Chicano Role in the American

 Political System (3-3) [AI]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) [AI]

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)

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 English Placement Test and Writing Competency requirements and Chicana and Chicano Studies 111B or Africana Studies 120 or American Indian Studies 120 or English 100 or Linguistics 100 or Rhetoric and Writing Studies 100 or 101. 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, English 200, Linguistics 200, or Rhetoric and Writing Studies 200.

## CCS 201. Intermediate Náhuatl I (4) [GE]

Four lectures plus laboratory.
Prerequisite: Chicana and Chicano Studies 102.
Further development of reading, writing, listening, and speaking skills in Náhuatl, with emphasis on language used in everyday conversations and reading of historical texts.

## 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 <br> (Intended for Undergraduates)

## CCS 301. Political Economy of the Chicano People (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors. 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]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors. 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)

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]

(Same course as Latin American Studies 310)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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] <br> (Same course as English 335)

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Ideas, forms, history of significant Chicana and Chicano prose, poetry, and other literary genres.

CCS 340A. Gender, Sex, and Politics in Colonial Mexico (3)
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)

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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] (Same course as Latin American Studies 355)
Prerequisites: Upper division standing; and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. 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]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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]

(Same course as Latin American Studies 380)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. 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 C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition 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]

(Same course as Latin American Studies 400)
Prerequisite: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 405. Performing Transnational Citizenship (3)

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 410. Capstone: Critical Discourse in Chicana and Chicano

 Studies (3)Prerequisites: Senior standing. Open only to Chicana and Chicano Studies majors.

Ethical and substantive issues and themes pertinent to borderland communities in the US-Mexican region.

## CCS 450. Chicano and Latino Theatre (3) [GE]

Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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)

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 twelve hours per week plus four class meetings.
Prerequisites: Upper division standing, Chicana and Chicano 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 <br> In the College of Education 

## OFFICE: Education and Business Administration 403 <br> TELEPHONE: 619-594-5380 / FAX: 619-594-5921 <br> E-MAIL: cfdev@mail.sdsu.edu

## Faculty

Emeritus: Balkwell, Deutsch, Roberts, Ross
Chair: Ritblatt
Professors: Hokoda, Ritblatt
Assistant Professors: Garrity, Longstreth, Rieth, Schaack, Shapiro
Lecturers: Booth, Gardner, 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-socio-emotional and behavior regulation intervention specialist (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. Al children's programs are mainstreamed 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 marriage and family therapy; occupational and physical therapy; social work; psychology; law; or sociology. Also available are programs leading to the multiple subject and single subject teaching credentials, and a specialis credential in either special education or early childhood education.

The child development minor is an important adjunct for students in areas such as anthropology, education, nursing, psychology, recreation, social work, and sociology.

## 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 or higher: Child and Family Development 135, 270, 270L (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 (Cr/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 higher.

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 Check. 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 fulfil 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 or higher.

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, 375B, 375C, $475,537,560,575,578,590,598$, 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 Developmen 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)

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 relationships-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 the College of Extended Studies 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" 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

## (SIMS Code: 662925)

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" 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.

+ Indicates course with prerequisites not included in requirements listed above.


## 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 human development using a cultural/ecological framework applied to case studies and direct observations. Open only to liberal studies majors. 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, Psychology 230, or Teacher Education 170.
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, 270L (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 <br> (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) Cr/NC
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) Cr/NC
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. Not to exceed three units of credit in any combination with Child and Family Development 376A completed prior to fall 2006.

## CFD 378C. Laboratory Experiences: Age 6 Through

## Adolescence (1-3) Cr/NC

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) Cr/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 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, Sociology 101, and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences.

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, 380; 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, 370 and Sociology 101. 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, 375C, 475, 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: Senior standing. Concurrent registration in Child and Family Development 597.

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 270 or Psychology 230, Child and Family Development 353A, 353B, 353C, 370, and completion of 12 upper division units in child and family development with a grade of C (2.0) or better for majors; consent of instructor for graduate students. Proof of completion of prerequisites required: Copy of transcript.

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)
Prerequisite: 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) Cr/NC

Two hours of activity.
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
http://www-rohan.sdsu.edu/dept/linguist/index.html
http://www-rohan.sdsu.edu/dept/chinese

## Faculty

Emerita: Woo
Chair: Osman
Professor: Zhang
Associate Professor: Wu

## 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 <br> 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 451 [or Comparative Literature 451], 458, 459, History 566, 567, either Linguistics 420 or 501, Philosophy 351, 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)
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]
Prerequisites: Chinese 202 and completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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]

Prerequisites: Chinese 301 and completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Continuation of Chinese 301. Writing paragraphs and longer expository texts. Reading modern and classical literature.

## CHIN 354. Varieties of Written Chinese (3)

Prerequisite: Chinese 202
Different genres of Chinese writing from multiple time periods and regions of the Chinese speaking world. Samples both practical and creative genres, and recent innovative uses of language by Internet bloggers and in chat rooms.

## 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
The undergraduate degree in Civil Engineering is accredited by the Engineering Accreditation Commission (EAC) of ABET, Inc., 415 North Charles Street, Baltimore, MD 21201; telephone: 410-347-7700.

## Faculty

Emeritus: Banks, Chang, Chou, Gurol, Hayhurst, Johnson, Krishnamoorthy, McGhie, Noorany, Sharabi
Chair: Supernak (Interim)
The AGC Paul S. Roel Chair in Construction Engineering and Management: Walsh
The William E. Leonhard, Jr. Chair in Civil, Construction, and Environmental Engineering: Mladenov
Professors: Bayasi, Buyuksonmez, Ponce, Supernak, Valdes, Walsh, Westermo
Associate Professors: Dowell, Garoma Ararsso, Mitropoulos
Assistant Professors: Alves, Kinoshita, Mladenov

## Offered by the Department of Civil, Construction, and

 Environmental EngineeringDoctor 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 first appointee to the Chair, Dr. Kenneth D. Walsh, is an accomplished teacher-scholar, with a research background in improvement of production systems in construction in residential, commercial, and heavy civil settings

## 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.

## Mission of the Department

The mission of the Department of Civil, Construction, and Environmental Engineering is to provide a high quality undergraduate and graduate education in the civil, construction, and environmental engineering areas as well as the advising and other support needed to ensure the students' academic success and preparation for a productive engineering career. In addition, through research and continuing professional development, the faculty produce, enhance and promote new developments within their areas of expertise for the benefit of society and the furtherance of their profession.

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.

## Educational Objectives

The objectives of the civil engineering program are: 1) to provide graduates with the technical knowledge and skills required to practice civil engineering; 2) to provide graduates with an understanding of the ethical, social, legal, and professional issues faced in civil engineering practice; and 3) to provide graduates with a solid foundation for graduate studies, continuing education, and life-long professional development.

## 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.

## General Education

Students will complete a minimum of 50 units in General Education, to include a minimum of nine upper division units taken after attaining junior class standing. No more than 12 units may be used for General Education credit from any one department or academic unit. No more than 7 units from one department can be used in Sections II and IV combined (Foundations of Learning and Explorations of Human Experience), nor more than 10 units from one department in Sections II, III, and IV combined (Foundations of Learning, American Institutions, and Explorations of Human Experience)
I. Communication and Critical Thinking: 9 units

You may not use Credit/No Credit grades in this section.

1. Oral Communication (3 units)
2. Composition (3 units)
3. Intermediate Composition and Critical Thinking (3 units)
II. Foundations of Learning: 29 units
A. Natural Sciences and Quantitative Reasoning (17 units):
4. Physical Sciences (11 units)

Engineering students will take Chemistry 202 (4 units) or Chemistry 200 (5 units)

Physics 195 (3 units)
Physics 195L (1 unit)
Physics 196 (3 units)
2. Life Sciences (3 units) Engineering students will take Biology 100 or 101.
3. Laboratory (satisfied under A.1. above)
4. Mathematics/Quantitative Reasoning Engineering students will take Mathematics 150, 3 units applicable to General Education. You may not use Credit/No Credit grades.
B. Social and Behavioral Sciences (3 units)
C. Humanities (9 units)

Complete three courses in three different areas. One of these courses and the one under IV.A. below must be taken in the same department. Civil engineering students will take Construction Engineering 101.
III. American Institutions: Three units of the six units of coursework which meet the American Institutions graduation requirement may be used to satisfy this section, excluding courses numbered 500 and above.
IV. Explorations of Human Experience: Courses in this area must not be taken sooner than the semester in which you achieve upper division standing ( 60 units passed). Upper division courses in the major department may not be used to satisfy General Education. Total 9 units; must include one course of cultural diversity.
A. Upper division Humanities (3 units)

Three units must be taken from the same department as one of the Humanities courses selected in Foundations of Learning.
B. Upper division Social and Behavioral Sciences (3 units).
C. Upper division Social and Behavioral Sciences (Engineering majors may satisfy this area with an additional American Institutions course (excluding 500-level) to complete the American Institutions requirement if this requirement was not completely satisfied with lower division coursework) (3 units).

## 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.

## 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 or higher: 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 (Cr/NC);
b. Have an overall cumulative GPA of 2.5 .

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)

The program below describes 135 units required for the degree Each course specifically listed in the program is required. 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; Aerospace Engineering 200 or Mechanical Engineering 200; Aerospace Engineering 220 or Mechanical Engineering 220; Aerospace Engineering 280; Biology 100 or 101; Chemistry 202 (or 200); Construction Engineering 101; Mathematics 150, 151, 252; Physics 195, 195L, 196. (51 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 or higher. These courses cannot be taken for credit/no credit (Cr/NC).

Engineering Science Elective. At least one of the following courses: Electrical Engineering 204; Mechanical Engineering 240, 350.

General Education. Engineering students must follow the specific General Education program outlined in this section of the catalog. Other general education requirements and limitations, as well as listings of specific General Education course electives are presented in the General Education section of Graduation Requirements for the Bachelor's Degree.

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 430; Environmental Engineering 355.

Professional Electives. Elective course choices must consist of at least one course from at least four of the six areas.

Water - Civil Engineering 445, 530.
Transportation - Civil Engineering 482, 580.
Environmental - Environmental Engineering 363, 441, 442, 556, 558.
Structural - Civil Engineering 521, 523, 525, 528.
Geotechnical - Civil Engineering 465.
Construction - Construction Engineering 401, 479, 480, 520.
Master Plan. A master plan of elective courses must be approved by the undergraduate adviser and filed with the Office of Advising and Evaluations as soon as the civil engineering major is declared. Students are required to see their undergraduate adviser prior to registration each semester.

## Courses (cive)

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; 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: Civil Engineering 160 and Mathematics 151.
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 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 <br> (Intended for Undergraduates)

CIV E 301. Introduction to Solid Mechanics (3)
Prerequisite: Aerospace Engineering 200 or Mechanical Engineering 200.

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 430 and credit or concurrent registration in Environmental Engineering 441, 442, 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. (Formerly numbered Civil Engineering 423.)

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 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.

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
http://classicsandhumanities.sdsu.edu

## Faculty

Emeritus: Eisner, Genovese, Hamilton, Warren
Chair: Levitt Kohn
Associate Professors: Rybakova, Smith
Assistant Professor: Starkey
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 and the paper submitted for Humanities 490.

A minor is not required with this major.

## Emphasis in Classical Humanities

(SIMS Code: 111525)
Preparation for the Major. Classics 101G-202G (10 unit sequence) or Classics 101L-202L (10 unit sequence) or 250L (8 unit sequence); and six units from any other lower division course offered in classics, or Comparative Literature 270A, History 105, Humanities 140. (14-16 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 English 508W 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. 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 and the approval must be filed with the Office of Advising and Evaluations

## Emphasis in Classical Language

(SIMS Code: 111526)
Preparation for the Major. Classics 101G-202G (10 unit sequence) or Classics 101L-202L (10 unit sequence) or 250L (8 unit sequence); and six units from any other lower division course offered in classics, or Comparative Literature 270A, History 105, Humanities 140. (14-16 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 English 508W 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. 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) or 250L (8 unit sequence). (18-20 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 English 508W 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. 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 nonlanguage 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 250L.

## CLASS 250L. Accelerated Latin (8)

(Offered only in the College of Extended Studies)
Intensive beginning classical Latin. Basic grammar, vocabulary, syntax. Preparation for Classics 303L. Not open to students with credit in Classics 101L and 202L.

## 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]

Prerequisites: Classics 202G; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Reading classical prose authors such as Xenophon or Plato in original Greek. Attention to vocabulary, syntax, style, and historicalcultural context.

## CLASS 303L. Reading Latin Prose (3) [GE]

Prerequisites: Classics 202L or 250L; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Reading classical prose authors such as Caesar or Cicero in original Latin. Attention to vocabulary, syntax, style, and historicalcultural context.

## CLASS 304G. Reading Greek Poetry (3) [GE]

Prerequisites: Classics 303G; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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]

Prerequisites: Classics 303L; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. 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. The Invention of European Literature (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. Recommended: Rhetoric and Writing Studies 200

Four classic works in the genre of epic and the novel in English translation; Homer's Iliad and Odyssey, Vergil's Aeneid, and Apuleius' Golden Ass. Literary criticism in historical-cultural contexts and relevance today.
CLASS 330. The Invention of European Drama (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. 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: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. 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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 450G. Seminar: Variable Topics in Greek Literature (3)

Prerequisite: Classics 304G.
Reading significant Greek 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 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
http://communication.sdsu.edu

## Faculty

Emeritus: Andersen, J., Andersen, P., Hellweg, Lustig, Samovar, Sanders
Director: Snavely
Professors: Beach, Dionisopoulos, Geist-Martin, Snavely, Spitzberg
Associate Professors: Lindemann, Pauley
Assistant Professors: Goehring, Winslow
Lecturers: Jarboe, McHan, 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 $O R$ 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 twentyfirst 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 healthrelated 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 $C$ or higher: six units selected from Communication 160, 201, 204, 245. These courses cannot be taken for credit/ no credit ( $\mathrm{Cr} / \mathrm{NC}$ );
b. Complete the general education oral communication requirement with a grade of C or higher. This course cannot be taken for credit/no credit (Cr/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 higher.

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 or higher 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, $484,485,496,499,508,555$, 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 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 $C$ or higher 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, 491, 492, 499, 555); and six units selected from Gerontology 360, 370, Health and Human Services 350, Nursing 350, Philosophy 330, 331, Public Administration 340, Public Health 353, 362, Social Work 430. (Three units selected from this list, except for Public Administration 340 and Social Work 430, will satisfy three units of the General Education requirement in IV. A., B., or C.)

## Communication Minor

## (Minor Code: 06011) (SIMS Code: 661119)

The minor in communication consists of a minimum of 21 units to include six units selected from Communication 160, 201, 204, 245; Communication 300; six upper division units selected from Communication 371, 406, 415, 450, 470, 491, 492; and six additional upper division units in communication. 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 higher; and six units selected from Communication 160, 201, 204 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 .

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 the College of Extended Studies.

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.

For additional information, contact Dr. Meghan B. Moran at 619-594-0454 or mmoran@mail.sdsu.edu.

## 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 the College of Extended Studies.

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.

For additional information, contact Dr. Meghan B. Moran at 619-594-0454 or mmoran@mail.sdsu.edu.

## Courses (сомм)

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 focuses on the role of communication in initiating, developing, and transitioning through everyday relationships. Emphasis on verbal and nonverbal messages, contexts, and challenges of managing interpersonal communication.
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) Cr/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]
Prerequisites: Communication 103; and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors. 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]
Prerequisites: Communication 103; and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors. 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 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 communitybased 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. (Formerly numbered Communication 580.)

COMM 484. Language Dynamics and Human Interaction (3)
Prerequisites: Communication 300 and 350.
Powerful role of language on perception, interpretation, reaction, and response to environmental stimuli. Language choices on the nature of interpersonal relationships. Language in establishing and maintaining groups, societies, and cultures.

## 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) Cr/NC

Prerequisites: Communication 300 and 350; junior or senio standing. Admission to a major or minor in the School of Communication.

Students work at approved agencies off-campus under the combined supervision of agency personnel and instructors. Internship hours to be arranged. Maximum credit three units.

## COMM 491. Group Interaction (3)

Prerequisites: Communication 300 and 350. Admission to a major or minor in the School of Communication.

Research, theory, observation of group emergence, development relationships, interaction, and decision making across diverse settings.

## 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. Must have completed at least 21 units of upper division communication coursework.

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 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.

Communicative Disorders - Refer to "Speech, Language, and Hearing Sciences" in this section of the catalog. Community Health Education - Refer to "Public Health" in this section of the catalog.

# Comparative International Studies 

## In the College of Arts and Letters

## OFFICE: Arts and Letters 613 <br> TELEPHONE: 619-594-5028 <br> E-MAIL: cis@mail.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: Eniko Csomay
(Linguistics and Asian/Middle Eastern Languages)
Committee: Blanco (Spanish and Portuguese Language and Literatures), Donadey (European Studies), Gerber (Economics), Guang (Asian and Pacific Studies, Political Science), Abdel-Nour (Center for Islamic and Arabic Studies, Political Science), Pérez (Anthropology), Osman (Linguistics and Asian/Middle Eastern
Languages)

## 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 $A, B$, 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 or 150; (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, 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 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 six weeks spent abroad and completing a minimum of three units of study abroad. 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.

See the undergraduate adviser to make arrangements to meet the study abroad requirement.

Major. A minimum of 36 upper division units to include Comparative International Studies 300 and 400; 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 350, 352, 433, Women's Studies 310, 580;
(B) Culture and Society: Anthropology 303, 350, 422, 439, Geography 312, 554, Linguistics 350, Philosophy 340;
(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], Political Science 380, 565, Sociology 350, Women's Studies 581;
(D) Institutions and Change: 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], Comparative Literature 440, Humanities 350, Political Science 364;
(B) Asia (China): Asian Studies 458 or History 420, History 421 [or Asian Studies 421], 567, 566 or Political Science 575, Philosophy 351, Political Science 365, Religious Studies 340;
(C) Asia (General): Asian Studies 300 or 320, Asian Studies 451 [or Comparative Literature 451], Asian Studies 456, 459, 460, History 570, Korean 321, Political Science 362 or 575, Philosophy 353 or Religious Studies 338 or 341 or 345 , Religious Studies 315 or 339 or 342, Women's Studies 331;
(D) Europe: Comparative Literature 513, 514, European Studies 301, 424, French 424, 501, German 320, History 408, 527, Political Science 356, Russian 310, 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], 370;
(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 <br> (Intended for Undergraduates)

CINTS 300. Introduction to Comparative International Studies (3) Prerequisites: Upper division standing and completion of the General Education requirement in II. Foundations of Learning.

Comparative international studies through the lens of comparative area studies framework. Domestic issues in global context. Comparative research and study abroad.

## CINTS 400. Comparative International Studies Capstone (3)

 Prerequisites: Comparative International Studies 300 and completion of minimum six 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 <br> In the College of Arts and Letters 

## OFFICE: Arts and Letters 226 <br> TELEPHONE: 619-594-5307 / FAX: 619-594-4998 <br> E-MAIL: EandCL@mail.sdsu.edu <br> 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.
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 (majors choosing Plan II, however, are also required to take courses in foreign language literature).

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

The minor in comparative literature consists of a minimum of 15 units in comparative literature, 12 units of which must be in upper division courses. The 12 units of upper division work must be selected, with adviser's approval, from within one of the following interest areas:

European Literature (SIMS Code: 111715): Comparative Literature 513, 514

Asian, African, and Latin American Literature (SIMS Code: 111708) Comparative Literature 440, 445, 451 [or Asian Studies 451], 530.

Comparative Literary Theory (Theory of literature, genre study, literature in relation to other arts and disciplines) (SIMS Code: 111710): Comparative Literature 561, 580, 594, 595.

In addition the following variable content courses may be used in any of the above categories when they are appropriate: Comparative Literature 577, 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 (c LT)

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 270B, 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 <br> (Intended for Undergraduates)

## C LT 405. The Bible as Literature (3) [GE] <br> (Same course as English 405)

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Prose and poetry of the King James version.

## C LT 440. African Literature (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Reading selections from major Latin American authors.

## C LT 451. Modern Asian Literature (3) [GE]

(Same course as Asian Studies 451)
Prerequisites: Comparative Literature 270A or 270B or English 220 or Asian Studies 100 or 101; and completion of the General Education requirement in Foundations of Learning II.C. Humanities required for nonmajors.

Asian literatures from modern period of China, Japan, India, Korea, Philippines, Vietnam, and others.

## C LT 470. Folk Literature (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Studies in the ballad, bardic poetry, oral and popular literature and folklore.
C LT 498. Seminar: Comparative Literature Honors Thesis (3) Cr/NC
Prerequisites: Admission to departmental honors program and consent of honors 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.

## C LT 499. Special Study (1-3) Cr/NC

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 514. European Literature Since 1900 (3)

Prerequisites: Six units in literature.
Study of a literary period such as the Age of Modernism. May be repeated with new content. Maximum credit six units.

## C LT 530. Topics in Asian Literature (3)

Prerequisites: Six units in literature.
Specialized study of a selected topic in Asian literature. May be repeated with new content. See Class Schedule for specific 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 570. Ecocriticism (3)

Prerequisites: Six units in literature and/or creative writing.
In-depth study of relationship between environment and literature to include ecocritical literary theory, history, and practice.

## C LT 577. Major Individual Authors (3)

Prerequisites: Six units in literature.
In-depth study of the works of a major author, such as Dante, García Márquez, Murasaki, or Dostoyevsky. 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 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 <br> In the College of Sciences 

## OFFICE: Geology/Mathematics/Computer Science 206H <br> TELEPHONE: 619-594-3430 / FAX: 619-594-2459 <br> 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), Day (Geological Sciences), Demasi (Aerospace Engineering), Edwards (Computer Science), Fan (Mathematics and Statistics), Johnson (Physics), Kuznetsova (Physics), Kumar (Electrical and Computer Engineering), Levine (Mathematics and Statistics), Love (Chemistry and Biochemistry), Mahaffy (Mathematics and Statistics), Müller (Psychology), Olsen (Geological Sciences), Palacios (Mathematics and Statistics), Roch (Computer Science), Rohwer (Biology), Salamon (Mathematics and Statistics), Sandquist (Astronomy), Segall (Biology), Shen (Mathematics and Statistics), Venkataraman (Aerospace Engineering), Weber (Physics), Zeller (Biology), Xie (Computer Science).

## Offered by Computational Science

Doctor of Philosophy degree in computational science. Concentration in statistics.
Master of Science degree in computational 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. Introduction to 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 589. Computational Imaging (3)

Prerequisites: Mathematics 150 and 254
Mathematical techniques used for image processing and analysis Emphasis on variational techniques which lead to PDE based image processing algorithms, most are known as diffusion filters, and interface propagation techniques for which emphasis will be implicit representation (level-set methods). Representation and properties of curves and surfaces, statistical (PCA/ICA), and multi-resolution image analysis techniques.
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: 619-594-5718

## http://electrical.sdsu.edu

The undergraduate degree in Computer Engineering is accredited by the Engineering Accreditation Commission (EAC) of ABET, Inc., 415 North Charles Street, Baltimore, MD 21201; telephone: 410-347-7700.

## Faculty

Emeritus: Iosupovici, Harris, J., Panos
Chair: Tummala
Coordinator for Computer Engineering: Ozturk
Professors: Gupta, harris, f., Harris, J., Kumar, Lee, G., Marino,
Ozturk, Tummala
Associate Professor: Sarkar
Assistant Professor: Alimohammad

## 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
Reconfigurable Computing Laboratory
VLSI Design and Testing 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.

## General Education

Students will complete a minimum of 50 units in General Education, to include a minimum of nine upper division units taken after attaining junior class standing. No more than 12 units may be used for General Education credit from any one department or academic unit. No more than 7 units from one department can be used in Sections II and IV combined (Foundations of Learning and Explorations of Human Experience), nor more than 10 units from one department in Sections II, III, and IV combined (Foundations of Learning, American Institutions, and Explorations of Human Experience).
I. Communication and Critical Thinking: 9 units

You may not use Credit/No Credit grades in this section.

1. Oral Communication (3 units)
2. Composition (3 units)
3. Intermediate Composition and Critical Thinking (3 units)
II. Foundations of Learning: 29 units
A. Natural Sciences and Quantitative Reasoning (17 units):
4. Physical Sciences (7 units)

Physics 195 (3 units)
Physics 196 and 196L (4 units)
2. Life Sciences (3 units)

Engineering students will take Biology 100 or 101.
3. Laboratory (satisfied under A.1. above)
4. Mathematics/Quantitative Reasoning You may not use Credit/No Credit grades. Mathematics 150 (3 units applicable to General Education) Mathematics 151 (4 units)
B. Social and Behavioral Sciences (3 units)
C. Humanities (9 units)

Complete three courses in three different areas. One of these courses and the one under IV.A. below must be taken in the same department.
III. American Institutions: Three units of the six units of coursework which meet the American Institutions graduation requirement may be used to satisfy this section, excluding courses numbered 500 and above.
IV. Explorations of Human Experience: Courses in this area must not be taken sooner than the semester in which you achieve upper division standing ( 60 units passed). Upper division courses in the major department may not be used to satisfy General Education. Total 9 units; must include one course of cultural diversity.
A. Upper division Humanities (3 units)

Three units must be taken from the same department as one of the Humanities courses selected in Foundations of Learning.
B. Upper division Social and Behavioral Sciences (3 units).
C. Upper division Social and Behavioral Sciences (Engineering majors may satisfy this area with an additional American Institutions course (excluding 500-level) to complete the American Institutions requirement if this requirement was not completely satisfied with lower division coursework) (3 units).

## 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.

## 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 or higher: 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 2.5.

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)

## (SIMS Code: 445002 - Georgia)

The program below describes the 129 units required for the degree.

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 $C$ or higher. 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).

General Education. Engineering students must follow the specific General Education program outlined in this section of the catalog. Other general education requirements and limitations, as well as listings of specific General Education course electives are presented in the General Education section of Graduation Requirements for the Bachelor's Degree. (Fifty units, including 17 units from preparation for the major which count toward General Education credit, and three units of American institutions which count toward General Education credit.)

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. A master plan of elective courses must be approved by the faculty adviser and department chair and filed with the Office of Advising and Evaluations during the first semester of the junior year. Changes to the master plan are permitted at any time, with approval of the department chair.

## Courses (сомре)

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.
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: Grade of C (2.0) or better in Computer Engineering 160. 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.
Modelling, analysis and design of digital systems, primarily at the Logic Design level. Combinational and sequential networks. Not open to students with credit in Electrical Engineering 370.

## COMPE 271. Computer Organization (3)

Prerequisites: Grade of C (2.0) or better in Computer Engineering 160. 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 <br> (Intended for Undergraduates)

COMPE 361. Windows Programming (3)
Prerequisites: Grade of C-(1.7) or better in Computer Engineering 260 and 271

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: Grade of C- (1.7) or better in Computer Engineering 271.

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.
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 and 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, 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.

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
Programming applications involving file systems, relational databases, Structured Query Language (SQL), ADO.NET, clientserver 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 571. Embedded Operating Systems (3)

Prerequisites: Computer Engineering 260 and 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 and 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

## In the College of Sciences

## OFFICE: Geology/Mathematics/Computer Science 413 <br> TELEPHONE: 619-594-6191 <br> http://www.cs.sdsu.edu

## Faculty

Emeritus: Anantha, Baase-Mayers, Donald, Lane, Marovac, Stewart, Swiniarski, Vinge, Vuskovic
Chair: Beck
Professors: Beck, Carroll, Roch, Tarokh, Valafar
Associate Professors: Eckberg, Edwards, Whitney, Xie
Assistant Professor: Wang
Lecturers: Bajic, Kraft, Riggins
Adjunct: Root

## 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;
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; and 12 units of science courses selected with approval of computer science adviser. The science courses must include one of the following two-semester sequences with laboratory: Physics 195, 195L, 196, 196L; or Chemistry 200, 201; or Biology 203, 203L, 204, 204L. The remainder of the 12 units must be science courses or courses that enhance the student's ability to apply the scientific method. (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.

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 541, 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.

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, 535, 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.

[^7]
## 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 Entry-Level Mathematics requirement.

Capabilities and applications of computers. Algorithmic problemsolving 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 Entry-Level Mathematics 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. Objectoriented programming to include inheritance, polymorphism, and generic code. Extensive programming in Java. Introduction to data structures.

## 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)

Prerequisites: Computer Science 108 and Mathematics 245
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 425. Tcl and Tk Interface Programming (3)

Prerequisite: Computer Science 320.
Presentation of Toolkit Command Language (Tcl) and Toolkit (Tk) languages, a portable programming environment for creating graphical user interfaces under X Windows, Microsoft Windows, and Macintosh. Writing scripts for Tcl, Tk, and extensions such as Expect.

## 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 535. Object-Oriented Programming and Design (3)

Prerequisites: Computer Science 310 and 320
Basic concepts of object-oriented programming; classes, objects, messages, data abstraction, inheritance, encapsulation. Objectoriented design methodology.

## 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) <br> 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) <br> (Offered only in the College of Extended Studies) <br> 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) <br> (Offered only in the College of Extended Studies) <br> 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 in the College of Extended Studies)
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 108 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 553. Neural Networks (3)

Prerequisites: Computer Science 320 and Mathematics 254.
Principles of neural networks, their theory and 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)

Prerequisite: Computer Science 310.
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 or 521A.
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; Statistics 550; 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 580. Client-Server Programming (3)

Prerequisites: Computer Science 570 and knowledge of an objectoriented programming language.

Client-server model, networking protocols for client-server programs, algorithmic issues in client-server programs, client-server protocols, implementing client-server applications.

## CS 581. Computational Linguistics (3)

(Same course as Linguistics 581)
Prerequisites: Computer Science 320 or Linguistics 571; Linguistics 570 or Mathematics 245.

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 541. Introduction to Numerical Analysis and Computing Mathematics 542. Introduction to Computational Ordinary of Differential Equations
Mathematics 579. Combinatorics
GRADUATE COURSES
Refer to the Graduate Bulletin.


# Construction Engineering 

In the College of Engineering

## OFFICE: Engineering 424 <br> TELEPHONE: 619-594-6071 <br> E-MAIL: ccee@sdsu.edu

The undergraduate degree in Construction Engineering is accredited by the Engineering Accreditation Commission (EAC) of ABET, Inc., 415 North Charles Street, Baltimore, MD 21201; telephone: 410-347-7700.

## Faculty

Chair: Supernak (Interim)
The AGC Paul S. Roel Chair in Construction Engineering and Management: Walsh
The William E. Leonhard, Jr. Chair in Civil, Construction, and Environmental Engineering: Mladenov
Professors: Bayasi, Supernak, Walsh
Associate Professor: Mitropoulos
Assistant Professor: Alves

## 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

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 first appointee to the Chair, Dr. Kenneth D. Walsh, is an accomplished teach-er-scholar, with a research background in improvement of production systems in construction.

## 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.

## Mission of the Department

The mission of the Department of Civil, Construction, and Environmental Engineering is to provide a high quality undergraduate and graduate education in the civil, construction, and environmental engineering areas as well as the advising and other support needed to ensure the students' academic success and preparation for a productive engineering career. In addition, through research and continuing professional development, the faculty produce, enhance and promote new developments within their areas of expertise for the benefit of society and the furtherance of their profession.

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.

## 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. The objectives of the construction engineering program are: 1) to provide graduates with the technical knowledge and skills required to practice construction engineering and manage construction projects; 2) to provide graduates with an understanding of the ethical, social, legal, and professional issues faced by the construction industry; and 3) to provide graduates with a solid foundation for graduate studies, continuing education, and life-long professional development.

## 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.

## General Education

Students will complete a minimum of 50 units in General Education, to include a minimum of nine upper division units taken after attaining junior class standing. No more than 12 units may be used for General Education credit from any one department or academic unit. No more than 7 units from one department can be used in Sections II and IV combined (Foundations of Learning and Explorations of Human Experience), nor more than 10 units from one department in Sections II, III, and IV combined (Foundations of Learning, American Institutions, and Explorations of Human Experience).

## I. Communication and Critical Thinking: 9 units

You may not use Credit/No Credit grades in this section.

1. Oral Communication (3 units)
2. Composition (3 units)
3. Intermediate Composition and Critical Thinking (3 units)
II. Foundations of Learning: 29 units
A. Natural Sciences and Quantitative Reasoning (17 units):
4. Physical Sciences (11 units)

Engineering students will take Chemistry 202 (4 units) or Chemistry 200 (5 units).

Physics 195 (3 units)
Physics 195L (1 unit)
Physics 196 (3 units)
2. Life Sciences (3 units)

Engineering students will take Biology 100 or 101.
3. Laboratory (satisfied under A.1. above)
4. Mathematics/Quantitative Reasoning

Engineering students will take Mathematics 150, (3 units) applicable to General Education. You may not use Credit/No Credit grades in this section.
B. Social and Behavioral Sciences

Construction engineering students will take Economics 102 (3 units)
C. Humanities (9 units)

Complete three courses in three different areas. One of these courses and the one under IV.A. below must be taken in the same department.
Construction engineering students will take Philosophy 101 (3 units), Construction Engineering 101 (3 units), and are strongly encouraged to take Spanish 101, 102, 201, 202, 211, 212, 281, or 282.
III. American Institutions: Three units of the six units of coursework which meet the American Institutions graduation requirement may be used to satisfy this section, excluding courses numbered 500 and above.
IV. Explorations of Human Experience: Courses in this area must not be taken sooner than the semester in which you achieve upper division standing ( 60 units passed). Upper division courses in the major department may not be used to satisfy General Education.
Total: 9 units; must include one course of cultural diversity.
A. Upper division Humanities

Construction engineering students will take Philosophy 332 (3 units).
B. Upper division Social and Behavioral Sciences (3 units).
C. Upper division Social and Behavioral Sciences (Engineering majors may satisfy this area with an additional American Institutions course (excluding 500-level) to complete the American Institutions requirement if this requirement was not completely satisfied with lower division coursework) (3 units).

## 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.

## 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 or higher: 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 (Cr/NC);
b. Have an overall cumulative GPA of 2.5.

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)

The program below describes 130 units required for the degree. Each course specifically listed in the program is required. In addition, the number of units specified in each elective category represents a minimum requirement.

Preparation for the Major. Construction Engineering 101, 201, 280; Accountancy 201; Aerospace Engineering 200 or Mechanical Engineering 200; Biology 100 or 101; Chemistry 202 (or 200); Civil Engineering 121, 160 (or Statistics 250), 218, 220; Economics 102; Geological Sciences 100, 101; Mathematics 150, 151; Philosophy 101; Physics 195, 195L, 196. (59 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 or higher. These courses cannot be taken for credit/no credit (Cr/NC).

General Education. Engineering students must follow the specific General Education program outlined in this section of the catalog. Other general education requirements and limitations, as well as listings of specific General Education course electives are presented in the General Education section of Graduation Requirements for the Bachelor's Degree.

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, 310, 312, 320, 401, 430, 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 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 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 310. Analysis and Design of Construction Operations (3)

Prerequisite: Construction Engineering 280
Properties and methods for use of construction equipment and integration of construction equipment into production system. Assessment of equipment needs and selection. Site utilization and layout planning, incorporating efficiency and safety of operations.

## CON E 312. Mechanical and Electrical Principles for

 Construction (3)Two lectures and three hours of laboratory.
Prerequisites: Mathematics 151 and Physics 196.
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: Credit or concurrent registration in Construction Engineering 310. 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.

Identifying and estimating time and cost requirements for construction operations based on drawings and specifications. Use computer applications for estimating.

## CON E 401. Construction Planning and Scheduling (3)

Two lectures and three hours of laboratory.
Prerequisites: Construction Engineering 320 and Civil Engineering 160 for construction engineering majors; Civil Engineering 160 and 321 for civil engineering majors.

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 430. Principles of Engineering Economy (3)

Prerequisite: Mathematics 151.
Mathematics of finance applied to engineering and managerial decision making. Framework for cost management in engineering and construction.

## 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.

## 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 majors; Civil Engineering 444 for civil engineering majors; concurrent registration in Civil Engineering 495 for environmental engineering majors or Environmental Engineering 495.

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 401 and 430.
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 

## In the College of Education

## OFFICE: North Education 179

TELEPHONE: 619-594-6109 / FAX: 619-594-7025 http://go.sdsu.edu/education/csp/schoolpsychology. aspx

Accredited by the California Commission on Teacher Credentialing and the National Association of School Psychologists.

## Faculty

Emeritus: Cummins, Feinberg, Hawley, Howard, Miller,
O'Shaughnessy, Ramage, Robinson-Zañartu, Senour,
Terry-Guyer, Thompson
Chair: Butler-Byrd
Professors: Ingraham, Monk
Associate Professors: Butler-Byrd, Green, Hatch, Lim, Taylor Assistant Professors: Estrada, Lambros Ortega, Miller, Owen, Tran

## 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.

## 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]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II. B., Social and Behavioral Sciences.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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 degrees.

## 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

(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.

GRADUATE COURSES
Refer to the Graduate Bulletin.

# Criminal Justice 

# In the College of Professional Studies and Fine Arts 

## OFFICE: Professional Studies and Fine Arts 100 TELEPHONE: 619-594-6224 / FAX: 619-594-1165

## Faculty

Emeritus: Boostrom, Gazell, Gitchoff, Henderson, Rea, Sutton Director: Henry
Professor: Henry
Associate Professors: Kaplan, Mclllwain, Mobley, Nurge, Sabath Assistant Professor: Chanin

## 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 admin istrative responses to crime. As the systems designed to deliver ustice 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 or higher: Political Science 102; Sociology 101 and 102; and a 3-unit course in elementary statistics. 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 2.80 or higher.

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 thei 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)
All candidates for a degree in applied arts and sciences must complete the graduation requirements in the section of this catalog on "Graduation Requirements."

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 $(\mathrm{W})$ 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 Crimina 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 for a copy of the guide or download it at http://spa.sdsu.edu/web/index. php/academic_programs/criminal_justice_undergraduate_program.

## Courses (cu)

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)

Prerequisites: Criminal Justice 300 and Public Administration 301.
Significant developments at state and federal levels, including court unification and financing, leadership, congestion, training, selection, tenure, discipline, removal and retirement of court related personnel; and technological applications.

## 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 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.

## Dance

## In the College of Professional Studies and Fine Arts

OFFICE: Music 112<br>TELEPHONE: 619-594-6031 / FAX: 619-594-1692<br>E-MAIL: music.dance@sdsu.edu

## Faculty

Emeritus: Hempel, Nunn, Sandback, Willis
Director: Friedrichs (Interim)
Division Coordinator: Alter
Associate Professors: Alter, Seiters
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.

## 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 dance minor is available 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 class demonstrating contemporary modern technical skills and a brief creative study involving improvisational choices.
- Students will also have the option (not required) of performing a two-minute dance in modern dance, ballet, or jazz.
The following qualities will be assessed:
- Basic technical skills in dance, and the aptitude for mastering physicality, musicality, phrasing and dynamics.
- Attentiveness and the comprehension of instructions.
- Creativity and enthusiasm.
- Basic performance skills utilizing focus and presence.

In order to continue in the B.F.A. program in dance, students must demonstrate a 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.
- Junior Level Review: Students must successfully pass this review to continue into the junior year. Faculty will formally review coursework and assess videotape samples of choreography and technique from the freshman and sophomore years.


## 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.

For information regarding this program contact the dance coordinator or the School of Music and Dance.

Preparation for the Major. Dance 100D, 171, 181, 183, 210, 221 (four units), 241 (12 units), 250 (six units), 289, 290 [or Music 290]; Biology 100. (40 units)

Dance 250, 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 41 upper division units to include Dance 350, 356, 365 (two units), 371, 380, 385, 390 [or Music 390], 410, 421 (four units), 441 (12 units), 453, 471, 481, and one unit of upper division dance electives.

## Dance Major

## With the B.A. Degree in Liberal Arts and Sciences <br> (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 51 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 171, 181, 221 (four units), 241 (six units), 250 (six units), 289, 290 [or Music 290]; Biology 100. (29 units)

Dance 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 upper division units to include Dance 350, 371, 380, 385, 390 [or Music 390], 410, 441 (six units), 481; and three units of upper division dance electives.

## 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 23 units in dance, of which nine units must be upper division, to include Dance 181, 183, 221, 241, 250, 350, 380; and four units selected from Dance 371*, 471 or 481. All minors are required to usher two performances per semester.

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 prerequisite required.


## 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
I. Beginning Modern Dance

DANCE 165. University Dance Company (1-2) Cr/NC
More than three hours of activity per week.
Prerequisites: Audition and approval by dance faculty.
Performing 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. Maximum credit four units.

## 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 183. Rhythmic Analysis (2)

One lecture and two hours of activity.
Music as related to movement; notation and simple music forms applied to all movement activities; percussion accompaniment; writing of percussion scores, music repertoire for dance.

## 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 241. Modern Dance I (3)

Six hours of activity.
Development of modern dance skill with emphasis on function of alignment and articulation of extremities in motion. Maximum credit 12 units.

## DANCE 250. Dance Making I (3)

One lecture and four hours of activity.
Prerequisite: Dance 241.
Traditional and contemporary principles, methods and practices of choreography, and improvisational dance making. Dance activity explores practices and orchestrates all aspects of composition and dance performance. May be repeated once. Not open to students with credit in Dance 253, 255, and 256. (Formerly numbered Dance 253 and 255 or 253 and 256.)

## 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 <br> (Intended for Undergraduates)

## DANCE 350. Dance Making II (3)

One lecture and four hours of activity.
Prerequisites: Dance 250 and upper division standing in dance
Traditional and contemporary principles, methods and practices of choreography, and improvisational dance making. Dance activity explores practices and orchestrates all aspects of composition and dance performance. (Formerly numbered Dance 353 and 354.)

## DANCE 356. Contact Improvisation (2)

One lecture and two hours of activity.
Prerequisite: Dance 250 with a grade of C or better.
Weight sharing, gravity, and momentum. Duet improvisational skills to include partnering work that requires trust, responsiveness, and immediacy. Maximum credit six 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]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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 leve assessment.

Teaching theory as applied to ballet and modern dance for adult populations. (Formerly numbered Dance 285.)
DANCE 390. Somatic Practices for Performers (2)

## (Same course as Music 390)

One lecture and two hours of activity.
Prerequisite: Dance 290 or Music 290 with a grade of $C$ or better.
Analysis, investigation, and physical realization of movement theory systems to include body modalities of yoga, Pilates, Alexander technique.

DANCE 398. Dance Internship (1-3)
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 441. Modern Dance II (3)
Six hours of activity
Prerequisite: Dance 241.
Advanced modern dance techniques based on skills developed in Dance 241 with emphasis on performance qualities in projection, vitality, and executing. Maximum credit 12 units.

## DANCE 453. Senior Capstone (2)

One lecture and two hours of activity.
Prerequisite: Dance 350.
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

In the College of Education

OFFICE: Education and Business Administration 248
TELEPHONE: 619-594-5155 / FAX: 619-594-1183 http://go.sdsu.edu/education/dle

Accredited by the California Commission on Teacher Credentialing.

## Faculty

Emeritus: Espinosa, Jones, Kuhlman, Ochoa
Chair: Alfaro
Professor: Cadiero-Kaplan
Associate Professor: Alfaro
Lecturers: Aste, Collins-Parks, Maheronnaghsh, Ramirez

## 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).

## 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.

## Bilingual Credential Global Competence Requirement:

Both single and multiple subject credential candidates must meet the global competence requirement. Refer to Dual Language and English Learner Education Department website for details.

## Multiple Subject Bilingual 2042 Credential (Elementary K-6 Education): Spanish, Arabic, and Mandarin Emphasis

## (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, 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, 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.csumentor.edu along with the $\$ 55$ 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 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
(1) Complete online program application at https://app.applyyourself.com/?id=sdsu-grad;
(2) California Basic Educational Skills Test (CBEST) scores;
(3) Demonstration of Language and Cultural Proficiency:
- Spanish: Completion of DLE 415 or copies of CSET LOTE subtests III and $V$ for Spanish language emphasis;
- Mandarin: Copy of CSET LOTE subtests III and V for language of emphasis;
- Arabic: Copy of CSET LOTE subtests II and V 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 415;
(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 in language of emphasis and 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.cset.nesinc.com.
3. Prerequisite Courses. The following courses must be completed with a grade of "C" 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. |  |  |
| :---: | :---: | :---: |
|  |  | Units |
| DLE 515 | Multilingual Education: Theory and Practice for Biliteracy Teachers. | 3 |
| ED 451 | Introduction to Multicultural Education. |  |
| SPED 500 | Human Exceptionality |  |
| TE 280 | Health Education for Teachers |  |

Non-Liberal Studies Majors (must take the above and below prerequisite).
MATH 210** Number Systems in Elementary Education $\qquad$
** 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 Dual Language and English Learner Education Department (DLE), EBA-248. 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. Evidence must be documented.
8. Written Statement of Professional Goals and Philosophy and Interview. 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 meet with a faculty adviser to plan an appropriate program, which includes a minimum of 31 units as defined by the California Commission on Teacher Credentialing. Make appointment in EBA-248, telephone 619-594-6320.
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 415 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 which includes a minimum of 31 units as defined by the California Commission on Teacher Credentialing.

## Multiple Subject Bilingual 2042 Program

| DLE 523 | Psychological Foundations for Biliteracy Teachers in K-6 Classrooms. |
| :---: | :---: |
| DLE 532 | Biliteracy Teaching in Language Arts for Elementary Students |
| DLE 910 | Teaching Mathematics to Bilingual Students ........ 3 |
| DLE 911 | Teaching Social Studies to Bilingual Students |
| DLE 912 | Teaching Science to Bilingual Students |
| DLE 915A | Teaching and Learning in the Content Area: <br> English Language Development/SDAIE: <br> Multiple Subjects |
| DLE 931 | Skills in Teaching Reading to Bilingual <br> Elementary Students |
| DLE 954 | Classroom Organization for Democratic <br> Teaching in Bilingual Classrooms .................... 1-4 |
| DLE 960 | Professional Seminar for Bilingual <br> Teacher Candidates (Cr/NC)............................ 1-4 |
| DLE 961 | Practicum in Elementary Bilingual <br> Classroom (Cr/NC) ......................................... 1-12 |
| DLE 962 | Student Teaching for Elementary Bilingual <br> Students II (Cr/NC). |
| ED 970 | Teaching Event Assessment ( $\mathrm{Cr} / \mathrm{NC}$ ) |

## 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 500
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 or PACT).

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 "General Regulations."

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 6-12): Spanish Emphasis

## (Credential Code: 00100)

The Single Subject Bilingual (Spanish) Teaching Credential (Secondary Education) 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 Bilingual" in the application for graduate admission to SDSU (Code: 00100). Students applying for admission should electronically submit the university application available at http://www.csumentor. edu along with the $\$ 55$ 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 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
(1) Complete online program application at https://app.applyyourself.com/?id=sdsu-grad;
(2) California Subject Examination for Teachers (CSET) scores or adviser recommendation;
(3) California Basic Educational Skills Test (CBEST) scores;
(4) Demonstration of Language and Cultural Proficiency:
- Spanish: Completion of DLE 415 or copies of CSET LOTE subtests III and $V$ for Spanish language emphasis;
(5) TB verification;
(6) Two letters of recommendation, one of which must be from an elementary teacher if multiple subject or from a secondary teacher if single subject;
(7) Verification of early field experience;
(8) Certificate of clearance (live scan);
(9) CPR that includes infant/child/adult;
(10) 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 in Spanish and English.


## Standards for Admission

1. CBEST. Students must pass the California Basic Educational Skills Test (CBEST) prior to admission to the Single Subject Bilingual Emphasis credential program. Candidates are urged to take this examination as early as possible. This examination is required by the California 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 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 com-petency are valid for five years from the date of the examination. Information and registration materials are available at http://www.cset.nesinc.com.

## 3. Prerequisite Courses:

Units

DLE 515 | Multilingual Education: Theory and Practice |
| :--- |
| for Biliteracy Teachers ............................................ 3 |

ED 451 Introduction to Multicultural Education .................... 3
SPED 450 Classroom Adaptations for Special Populations . .3
TE 280 Health Education for Teachers ................................. 1
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 Dual Language and English Learner Education (DLE), EBA-248. 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 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.
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 adolescent students in typical classroom settings within the three years. Evidence must be documented.
8. Oral English and Written Statement of Professional Goals and Philosophy. Have an interview with the admissions and retention committee of the Dual Language and English Learner Education 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 Dual Language and English Learner Education Department.
10. 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-248, telephone 619-594-6320.
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 415 or CSET LOTE III and V.
12. Appeals Process. Candidates who do not meet all the admission requirements may petition the Dual Language and English Learner Education Department Admissions and Retention Committee for individual consideration; petition letters must be submitted concurrently with the application packets.
13. 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 Dual Language and English Learner Education 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 which includes a minimum of 31 units as defined by the California Commission on Teacher Credentialing.

| Single Subject Bilingual 2042 Program |  |  |
| :---: | :---: | :---: |
| DLE 400 | The Secondary School and Bilingual Education |  |
| DLE 524 | Psychological Foundations for Biliteracy Teachers in Grades 7-12 |  |
| DLE 653 | Language Development in K-12 Multilingual Classrooms. |  |
| 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 for Democratic Teaching in Bilingual Classrooms ....... | $3$ |
| DLE 960 | Professional Seminar for Bilingual Teacher Candidates (Cr/NC).... |  |
| DLE 963 | Practicum in Secondary Bilingual Classroom (Cr/NC) | 3-4 |
| DLE 964 | Student Teaching for Bilingual Secondary Students II | 8-12 |
| ED 970 | Teaching Event Assessment (Cr/NC) | 3 |
| 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 School of Teacher Education single subject teaching credential catalog section. Credentials can be granted only in the designated single subject credential areas.
2. Completion of an approved program of professional education. (See Dual Language and English Learner Education Department 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 with a written recommendation from the Ryan major adviser.
Candidates applying for the Single Subject Credential program after August 31, 1995 who have not satisfied subject matter competency through coursework or PRAXIS examination(s), must take and pass a new set of examinations for the Single Subject Credential in seven areas: biology\#, chemistry\#, English language arts, geoscience\#, mathematics, physics\#, and social science. Candidates for the science authorizations (noted with \#) must also take and pass a general science examination. Candidates should check with the Dual Language and English Learner Education Department (DLE) adviser, EBA-248, to clarify the appropriate means for satisfaction of the subject matter competency requirement.
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. Completion of an approved fifth year program (a minimum of 30 upper division or graduate-level postbaccalaureate units).
7. Demonstrate knowledge of the needs of and methods of providing educational opportunities to individuals with exceptional needs: Special Education 500.
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 units) and verification of current CPR competency.
10. Successful completion of a California Teacher Credentialing approved Teacher Performance Assessment (edTPA or PACT).
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 "General Regulations."

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.

## 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.

## UPPER DIVISION COURSES (Intended for Undergraduates)

## DLE 400. The Secondary School and Bilingual Education (3)

Prerequisite: Upper division standing.
Bilingual education at the secondary levels, including roles, curricular models, organization, and legal justification. Must demonstrate bilingual competencies before conclusion of course and admission to program. Taught in Spanish. (Formerly numbered Policy Studies in Language and Cross-Cultural Education 400.)

## DLE 415. Biliteracy Foundations for Teaching and Learning in

 Diverse Communities (4)Three lectures and two hours of activity.
Prerequisite: Upper division standing.
Oral, written, and communicative competencies in Spanish through practical experiences and study of socio-political and socio-cultural contexts impacting bilingual learners in culturally and linguistically diverse communities. Maximum credit eight units. (Formerly numbered Policy Studies in Language and Cross-Cultural 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 <br> 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. (Formerly numbered Policy Studies in Language and Cross-Cultural Education 515.)

## 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. (Formerly numbered Policy Studies in Language and Cross-Cultural Education 523 and 923.)

## 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. (Formerly numbered Policy Studies in Language and Cross-Cultural Education 524 and 924.)

## DLE 532. Biliteracy Teaching in Language Arts for Elementary Students (3)

Prerequisites: Dual Language and English Learner Education 415 and 515.

Assessing language proficiency; selecting, designing, and evaluating learning experiences to develop biliteracy in K-6 classrooms in English language arts and Spanish, Arabic, or Mandarin. Taught bilingually in language of emphasis and English. (Formerly numbered Policy Studies in Language and Cross-Cultural Education 532 and 932.)

## 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. (Formerly numbered Policy Studies in Language and Cross-Cultural Education 553.)

## 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.

## Economics

## In the College of Arts and Letters

## OFFICE: Nasatir Hall 329

TELEPHONE: 619-594-1675 / FAX: 619-594-5062

## Faculty

Emeritus: Adler, Babilot, Barckley, Boddy, Clement, Frantz, Gifford, Green, Grossbard, Hambleton, Kartman, Leasure, Madhavan, Nam, Popp, Poroy, Sebold, Steinberg, Stewart, Thayer, Turner, Venieris Chair: Thayer
Professors: Amuedo-Dorantes, Gerber, Hilmer, C., Hilmer, M., Imazeki, Lee
Associate Professors: Balsdon, Foad, Puttitanun, Sabia, Shahriar
Assistant Professor: 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 consumer-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 or higher: Economics 101, 102; Accountancy 201; 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 higher;
c. To be admitted to the emphasis in international economics (major code 22042), 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 or higher. 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; Accountancy 201; Economics 201 or Statistics 119 or 250; one course selected from Mathematics 120, 124, or 150; 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 or higher.

Students completing the California Community College Associate in Arts in Economics for Transfer (AA-T) will satisfy preparation for the major. If Accountancy 201 and Management Information Systems 180 were 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, 489, 561, 565, 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> (Major Code: 22042) (SIMS Code: 111920)

Preparation for the Major. Economics 101, 102; Accountancy 201; Economics 201 or Statistics 119 or 250; Mathematics 120, 124, or 150; 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 or higher.

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 College of Business Administration) 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, 489, 561, 565, 592.
B. Up to six units of electives may be selected from Economics $311,338,349,380,382,401,403,406,422,441,449 W, 455$, 456, 458, 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

## (Major Code: 22041) (SIMS Code: 111961)

Preparation for the Major. Economics 101, 102; Accountancy 201; Economics 201 or Statistics 119 or 250; Mathematics 120, 124, or 150; Communication 160; Management Information Systems 180. (21 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 or higher.

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, 458, 485, 487, 490.
B. Three units of electives selected from the international group: Economics 330, 360, 365, 460, 463, 464, 466, 489, 561, 565, 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; Accountancy 201; Mathematics 150; Management Information Systems 180. (19 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$; except for courses taught as Cr/NC only. The minimum grade in each class is C or higher.

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

## (Minor Code: 22041) (SIMS Code: 111901)

The minor in economics consists of a minimum of 18 units in economics to include Economics101 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, $466,489,561,565,592$. 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, 458, 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 Entry-Level Mathematics 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 Entry-Level Mathematics 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]
Prerequisites: Course in intermediate algebra, satisfaction of the Entry-Level Mathematics requirement, and qualification on the Mathematics Departmental Placement Examination, Part 1A.

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; 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 <br> (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

## CON 330. Comparative Economic Systems (3) [GE]

Prerequisites: Six units of economics to include Economics 102 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences. General Education prerequisite not required for Economics majors.

Current economic systems from primarily laissez-faire to statecontrolled 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: Six units of economics to include Economics 102
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 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 C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition 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) <br> 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. (Formerly numbered Economics 453.)

## 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. (Formerly numbered Economics 452.)

## ECON 458. Urban Economics (3)

Prerequisite: Economics 102.
Major influences on economic conditions of urban areas; specific urban issues including growth and housing. Discussion of San Diego issues.

## 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; and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences. General Education prerequisite not required for Economics majors.

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 102 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 489. Economics and Population (3) [GE]

Prerequisites: Six units of economics to include Economics 102; and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences. General Education prerequisite not required for Economics majors.

Relation of fertility, marriage, migration, and other dimensions of population to various economic factors affecting household behavior. Demographic measures and projections, application to product markets and to policies of developed and less developed countries.

## 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 <br> (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 565. North American Economic Relations (3)

Prerequisites: Economics 101 and 102. Recommended: Economics 360.

Socioeconomic development of U.S., Mexico, and Canada since World War II. Issues affecting the three countries' relations, including trade investment, technology, and international organizations and agreements.

## ECON 592. International Monetary Theory and Policy (3) <br> 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

Refer to the Graduate Bulletin.

## Education

In the College of Education

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.

## 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]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

Philosophical, historical and psychological roots of education in America; current models, instructional designs and strategies of education. Contemporary concerns in education.

## 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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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.

## UPPER DIVISION COURSE (Also Acceptable for Advanced Degrees)

## ED 516. Foundations of Bilingual Education (1)

(Offered only at IVC)
Prerequisite: Credit or concurrent registration in Education 451
Overview of models of bilingual education programs for language minority students.

GRADUATE COURSES
Refer to the Graduate Bulletin.

## Educational Leadership <br> In the College of Education

## OFFICE: North Education 166

TELEPHONE: 619-594-4063
E-MAIL: EDL@mail.sdsu.edu
http://go.sdsu.edu/education/edI/
Accredited by the California Commission on Teacher Credentialing and the National Council for Accreditation of Teacher Education.

## Faculty

Emeritus: Basom, Cohn, Downey, Latta, Meno, Merino, Streshly, Warburton, Wetherill, Yerkes
Chair: Fisher
Professors: Chance, Fisher, Frey, Johnson, Pumpian, Uline
Associate Professor: James-Ward
Assistant Professor: Marshall

## 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 credentials
Minor in leadership development.
Certificate in educational facility planning (refer to the Graduate Bulletin).

## Leadership Development Minor

(Minor Code: 08271) (SIMS Code: 331907)
The minor in leadership development consists of a minimum of 17 units to include Administration, Rehabilitation and Postsecondary Education 205, 380, 403; Educational Leadership 404, 405; and six units of electives selected from Communication 371, Political Science 375, Public Administration 330, 340, 480, Philosophy 329, 330, 332, 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 (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 404. Field Laboratory in Leadership: Public Agencies and

 Businesses (1)Laboratory in public agencies and business settings to integrate academic work with experiences in the community.

## EDL 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 eadership principles to major field and career.
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.

## Electrical Engineering

## In the College of Engineering

## OFFICE: Engineering 426

TELEPHONE: 619-594-5718

## http://electrical.sdsu.edu

The undergraduate degree in Electrical Engineering is accredited by the Engineering Accreditation Commission (EAC) of ABET, Inc., 415 North Charles Street, Baltimore, MD 21201; telephone: 410-347-7700.

## Faculty

Emeritus: Abut, Bailey, Chang, Iosupovici, Harris, J., Lee, L., Lin,
Marino, Massey, Panos, Skaar, Stuart, Thyagarajan
Chair: Tummala
The Radio Frequency Communication Systems Industry Chair: Gupta
Professors: Gupta, harris, f., Kolen, Kumar, Lee, G., Ozturk, Sharma, Szeto, Tummala
Associate Professors: Ashrafi, Betancourt, Engin, Nagaraj, Sarkar, Seshagiri
Assistant Professors: Alimohammad, Huang, Sabzehgar

## 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 $A B E T$, 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.

## General Education

Students will complete a minimum of 50 units in General Education, to include a minimum of nine upper division units taken after attaining junior class standing. No more than 12 units may be used for General Education credit from any one department or academic unit. No more than 7 units from one department can be used in Sections II and IV combined (Foundations of Learning and Explorations of Human Experience), nor more than 10 units from one department in Sections II, III, and IV combined (Foundations of Learning, American Institutions, and Explorations of Human Experience).
I. Communication and Critical Thinking: 9 units

You may not use Credit/No Credit grades in this section.

1. Oral Communication (3 units)
2. Composition (3 units)
3. Intermediate Composition and Critical Thinking (3 units)
II. Foundations of Learning: 29 units
A. Natural Sciences and Quantitative Reasoning (17 units):
4. Physical Sciences ( 7 units)

Physics 195 (3 units)
Physics 196 and 196L (4 units)
2. Life Sciences (3 units)

Engineering students will take Biology 100 or 101.
3. Laboratory (satisfied under A.1. above)
4. Mathematics/Quantitative Reasoning

You may not use Credit/No Credit grades
Mathematics 150 (3 units applicable to
General Education)
Mathematics 151 (4 units)
B. Social and Behavioral Sciences (3 units)
C. Humanities (9 units)

Complete three courses in three different areas. One of these courses and the one under IV.A. below must be taken in the same department.
III. American Institutions: Three units of the six units of coursework which meet the American Institutions graduation requirement may be used to satisfy this section, excluding courses numbered 500 and above.
IV. Explorations of Human Experience: Courses in this area must not be taken sooner than the semester in which you achieve upper division standing ( 60 units passed). Upper division courses in the major department may not be used to satisfy General Education. Total: 9 units; must include one course of cultural diversity.
A. Upper division Humanities (3 units)

Three units must be taken from the same department as one of the Humanities courses selected in Foundations of Learning.
B. Upper division Social and Behavioral Sciences (3 units).
C. Upper division Social and Behavioral Sciences (Engineering majors may satisfy this area with an additional American Institutions course (excluding 500-level) to complete the American Institutions requirement if this requirement was not completely satisfied with lower division coursework) (3 units).
After enrollment in electrical engineering at SDSU, an Electrical Engineering major must take all upper division electrical engineering courses at SDSU unless prior approval is obtained from the department.

## 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.

## 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 or higher: 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 2.5 .

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)

## (SIMS Code: 443002 - Georgia)

The program below describes the 130 units required for the degree. Each course specifically listed in the program is required. In addition, the total number of units specified in each elective category represents a minimum requirement. These are General Education, American Institutions, 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 C or higher. 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 (Cr/NC).

General Education. Engineering students must follow the specific General Education program outlined in this section of the catalog. Other general education requirements and limitations, as well as listings of specific General Education course electives are presented in the General Education section of Graduation Requirements for the Bachelor's Degree. (Fifty units, including 17 units from preparation for the major which count toward General Education credit, and 3 units of American institutions which count toward General Education credit.)

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, 330L, 340, 380, 410, 420, 430, 434, 440, 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. A master plan of elective courses must be approved by the faculty adviser and department chair and filed with the Office of Advising and Evaluations during the first semester of the junior year. Changes to the master plan are permitted at any time, with approval of the department chair. After enrollment in electrical engineering at SDSU, an electrical engineering major must take upper division electrical engineering courses at SDSU unless prior approval is obtained from the department.

## 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.
Circuit analysis, phasor diagrams, single-phase and threephase 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.
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 <br> (Intended for Undergraduates)

## E E 300. Computational and Statistical Methods for Electrical

 Engineers (3)Prerequisite: Electrical Engineering 210.
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 comput-er-aided engineering tools.

## E E 310. Circuit Analysis II (3)

Prerequisites: Grade of C (2.0) or better in Electrical Engineering 210. Grade of C- (1.7) or better in Mathematics 252 or both Aerospace Engineering 280 and Mathematics 254.

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.
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.

Experimental study of laboratory instruments, diodes, rectifier circuits, filters, transistors, and operational amplifiers.

## E E 340. Electric and Magnetic Fields (3)

Prerequisites: Grade of C (2.0) or better in Electrical Engineering 210. Grade of C- (1.7) or better in Aerospace Engineering 280.

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. Time-varying fields; Maxwell's equations.

E E 380. Electrical Energy Conversion (3)
Prerequisite: Electrical Engineering 210.
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.

Experimental study of DC, single and polyphase AC circuits, transformers, and machines.

## E E 397. Discussion: Electrical Engineering (1) Cr/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. 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 430. Analysis and Design of Electronic Circuits (3)
Prerequisites: Electrical Engineering 310, 330, and Aerospace Engineering 280.

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.
Transistor dynamic characteristics; single stage and multistage
amplifier circuits including feedback, tuned amplifiers, voltage regulators, active filters, and A/D-D/A converters.
E E 434. Electronic Materials and Devices (3)
Prerequisites: Electrical Engineering 330 and 340.
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 440. Electromagnetic Waves (3)

Prerequisites: Electrical Engineering 310 and 340.
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 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.

Modern power system elements; calculation of load flow, fault currents, and system stability.

## E E 483. Power Distribution Systems (3)

Prerequisite: Electrical Engineering 380.
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 484. Power Electronics (3)

Prerequisites: Electrical Engineering 380 and credit or concurrent registration in Electrical Engineering 430.

Design and analysis of power electronic devices. Power semiconductor switches, switch-mode power supplies, dc-to-ac inverters, PM and PWM ac-to-ac converters. Power electronics applications. (Formerly numbered Electrical Engineering 583.)

## E E 490. Senior Design Project (4)

Two lectures and six hours of laboratory
Prerequisites: Computer Engineering 375, Electrical Engineering $330 \mathrm{~L}, 410$, and 430.

Supervised capstone design projects to provide integrative design experience for seniors to include ethics, professionalism, cost-effectiveness, and project management.

## E E 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.
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; 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 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 534. Solid-State Devices (3)
Prerequisite: Electrical Engineering 434.
Energy bands and charge carriers in semiconductors; generation, recombination, and transport of excess carriers; semiconductor junctions; unipolar and bipolar transistors; high-frequency, high-power, and optoelectronic devices; integrated circuits.

## 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 430L 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 541. Electro-Optics (3)

Prerequisite: Electrical Engineering 434.
Optical/electronic devices and systems; wave beams; light-matter quantum interactions; incoherent and laser light sources; modulators and detectors. Applications in data transmission, measurement, and materials processing.

## E E 556. Digital Signal Processing (3)

Prerequisite: Electrical Engineering 410.
Discrete-time signals and systems, Sampling, Z-transform, Discrete-time Fourier transform and frequency responses, DFT, FFT, and introduction to IIR and FIR digital filter design.

## 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 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

## In the College of Engineering

## OFFICE: Engineering 203 <br> TELEPHONE: 619-594-6061 <br> E-MAIL: info@engineering.sdsu.edu

The College of Engineering undergraduate programs in aerospace, civil, computer, construction, electrical, environmental, and mechanica engineering are accredited by the Engineering Accreditation Commission (EAC) of ABET, Inc., 415 North Charles Street, Baltimore, MD 21201; telephone: 410-347-7700.

## 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, intended for students in other academic areas of the university, consists of 15 units in engineering, 12 units of which must be in upper division courses. The courses must be approved by the dean of the College of 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 COURSE

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@mail.sdsu.edu
http://literature.sdsu.edu

## Faculty

Emeritus: Adams, Allison, Benson, Boe, Brashear, Brown, Bumpus, Butler, Chin, Davis, Farber, Gervais, Gregory, Griswold, Kehler, Koolish, Kuznets, Matlin, McCaffery, McLeod, Monteverde, Nelson, Neumeyer, Polkinhorn, Redding, M., Redding, R., Rogers, Rother, Sanderlin, Savvas, Scott, Sheres, Shojai, Vanderbilt, Wall, Widmer
Chair: Borgstrom
Professors: Alcosser, Brooks, Champion (IVC), Edson, Herman, Hicks, Jaffe, Kaminsky, Martin, Nericcio, Shumaker (IVC)
Associate Professors: Bailey, Borgstrom, Colquitt, Cummins-Lewis, Farris, Serrato, Stampfl (IVC), Thomas
Assistant Professor: Howard

## 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 $O R$ 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).

## 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 Comparative Literature 498 [if offered] or English 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 Comparative Literature 498 [if offered] or English 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 $C$ or higher: 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 (Cr/NC);
b. Have a cumulative GPA of 2.40 or higher.

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, $521-525,527,528,530,533,534,536,537,540 \mathrm{~A}, 540 \mathrm{~B}, 541 \mathrm{~A}$, 541B, 542-544. Must include at least three units of English $510 \mathrm{~A}, 521,522,530,533,534,536,537,540 \mathrm{~A}, 541 \mathrm{~A}$, or 542.
B. Twelve units selected from the following: English 405 [or Comparative Literature 405], 501-503, 519, 520, 526, 549, 550, 563, Comparative Literature 440, 445, 451 [or Asian Studies 451], 470, 513, 514, 530, 561, 570, 577, 580, 594, 595, 596. Must include at least three units of comparative literature.
C. Six units selected from the following: English 508W, 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 General Regulations), 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 six to eight additional units required for admission: Education 451 (3), Teacher Education 280 (1), and Special Education 450 (2), 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 $C$ or higher: 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 (Cr/NC);
b. Have a cumulative GPA of 2.40 or higher.

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 270B (3 units General Education II. C.1).
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 250A and 250B or 260A and 260B (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) Fulfills three units in General Education. Courses in the major cannot be double-counted.
9. English 502.
10. English 508W.
11. English 533.
12. For those who took English 250A-250B, select three units from English 510A, 530, 534, 536, 537, 540A, 541A, 541B, 542, and three units from English 510B, 540B, 543, 544. For those who took English 260A-260B, select six units from English 519, 521, 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, 451 [or Asian Studies 451], 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, 520, 550, Theatre 465, Women's Studies 352. (English and comparative literature courses and their cross-listed equivalencies may not count toward fulfillment of General Education IV.C.)
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 570-584W, Rhetoric and Writing Studies 500W.
Linguistics: Twelve units selected from Group A (ESL emphasis): Linguistics 452*, 454, 550*, 554*, 555* or Group B (English language linguistics emphasis): Linguistics 420, 551, 552*, 554*, 571.
Theatre: Twelve units selected from Theatre 325*, 359*, 510, 580*.
Journalism: Twelve units selected from Journalism and Media Studies 300, 408, 460, 480.

## *Additional prerequisites required.

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 development of English and American literary traditions. Three units selected from English 510A, 510B, 521, 522, 523, 524, 525, 527, 528, 530, 533, 534, 536, $537,540 \mathrm{~A}, 540 \mathrm{~B}, 541 \mathrm{~A}, 541 \mathrm{~B}, 542,543,544$.

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, 520, 526, 549, 550, 563, Comparative Literature 405, 440, 445, 451, 470, 513, 514, 530, 561, 577, 580, 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 the faculty of 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, 499 (Internship), 576A, 576B, three units selected from Rhetoric and Writing Studies 501, 503W, 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 499 (Internship).

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.

## 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 100.
Prerequisite: Satisfaction of the SDSU writing competency requirement. (See Graduation Requirements section of catalog.) If the EPT is used to satisfy the SDSU writing competency requirement, the required minimum score is 151. Students who score between 147-150 on the EPT enroll in Rhetoric and Writing Studies 101. Proof of completion of prerequisites required: Copy of EPT or competency scores or verification of exemption; proof of credit (Cr) in Rhetoric and Writing Studies 92.

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 Linguistics 100 or Rhetoric and Writing Studies 100 or 101.

## ENGL 102. Critical Reading (1)

(Same course as Rhetoric and Writing Studies 102)
Two hours of activity.
Prerequisites: Students who have met lower division writing competency through completion of either Rhetoric and Writing Studies 92; and concurrent registration in Rhetoric and Writing Studies 100.

For freshmen only. Cognitive and critical reading skills essential to academic writing at the university level.

## 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 writing competency requirement and Rhetoric and Writing Studies 100 or 101 or Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or English 100 or Linguistics 100. 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, 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, Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100 or Rhetoric and Writing Studies 100 or 101. 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 English 100, Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100 or Rhetoric and Writing Studies 100 or 101.

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, Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100 or Rhetoric and Writing Studies 100 or 101.

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, Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100 or Rhetoric and Writing Studies 100 or 101.

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, Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100 or Rhetoric and Writing Studies 100 or 101.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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 302. Introducing Shakespeare (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Representative tragedies, comedies, and histories. Primarily for the general student not specializing in English or comparative literature. This course does not count toward the English or comparative literature majors. Majors are required to take English 533.

## ENGL 305. Literature and Environment (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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 C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.
A. Reading, analysis, and discussion of classic works of children's literature.
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 C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition 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)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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)

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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 twentyfirst centuries.

## ENGL 401. Childhood's Literature (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Influential contemporary and classic literature for children and young adults, such as Charlotte's Web and the Harry Potter series. Sample topics include construction of childhood, cultural values and ethics, role models, subversion of adult power. Not applicable to English or comparative literature majors. Majors are to take English 501.

## ENGL 405. The Bible as Literature (3) [GE]

(Same course as Comparative Literature 405)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Prose and poetry of the King James version.

ENGL 409. Science Fiction (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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 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 analysis of literature intended for children. Study of texts and illustrations. 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.

Works centrally concerned with an adolescent protagonist. Includes both traditional novels of development (Bildungsroman) and contemporary young adult novels.

## ENGL 503. Topics in Children's Literature (3)

Prerequisites: Six lower division units in literature and/or creative writing.

Topics in children's and adolescents' literatures such as regionalism, multiculturalism, fantasy, science fiction, non-fiction, illustrated books, nineteenth-century classics, major works by twentieth-century authors, British children's literature, the noir young adult novel, and the history of genre. 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 C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition 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 520. African-American Literary Tradition (3)

Prerequisites: Six lower division units in literature and/or creative writing.

African-American literature from its eighteenth-century beginnings to the present. Early political and social concerns and concomitant utilitarian forms; aesthetic concerns and forms in nineteenth and twentieth centuries

## ENGL 521. Early American Literature (3)

Prerequisites: Six lower division units in literature and/or creative writing.

Representative works by American writers from the colonial period through the Revolution; to include works by Anne Bradstreet, Phillis Wheatley, Olaudah Equiano, Cotton Mather, Jonathan Edwards, Benjamin Franklin, Thomas Jefferson, various Native American speakers and writers, and others. See Class Schedule for specific content.

## 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. This course cannot be used in place of English 302 to satisfy General Education requirements

## 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-540B. English Fiction (3-3)
Prerequisites: Six lower division units in literature and/or creative writing.

The development of English fiction from its beginnings to the end of the nineteenth century. Semester I: The eighteenth century. Semester II: The nineteenth 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 542. British Literary Periods, 1660-1800 (3)
Prerequisites: Six lower division units in literature and/or creative writing.

Study of a literary period such as the Restoration or Enlightenment. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

## 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 549. Topics in English Literature (3)

Prerequisites: Six lower division units in literature and/or creative writing.

The works of Spenser, the metaphysical school of poetry, the English satirists, major movements in contemporary English fiction, and the like. May be repeated with new title and 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 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)
Prerequisite: English 576A.
Practical experience in small-press literary publishing. Expands on skills in creating and running a press to publish both 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 C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition 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 C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition 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 <br> In the College of Engineering 

## OFFICE: Engineering 424 <br> TELEPHONE: 619-594-6071 <br> E-MAIL: ccee@sdsu.edu

The undergraduate degree in Environmental Engineering is accredited by the Engineering Accreditation Commission (EAC) of ABET, Inc., 415 North Charles Street, Baltimore, MD 21201; telephone: 410-347-7700.

## Faculty

Emeritus: Gurol, Stratton
Chair: Supernak (Interim)
The Blasker Chair in Environmental Engineering: Buyuksonmez
The William E. Leonhard, Jr. Chair in Civil, Construction, and
Environmental Engineering: Mladenov
Professors: Buyuksonmez, Supernak, Walsh
Associate Professor: Garoma Ararsso
Assistant Professor: Mladenov

## 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 provide a high quality undergraduate and graduate education in the civil, construction, and environmental engineering areas as well as the advising and other support needed to ensure the students' academic success and preparation for a productive engineering career. In addition, through research and continuing professional development, the faculty produce, enhance and promote new developments within their areas of expertise for the benefit of society and the furtherance of their profession.

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.

## Educational Objectives

The objectives of the environmental engineering program are: 1) to provide graduates with the technical knowledge and skills required to practice environmental engineering; 2) to provide graduates with an understanding of the ethical, social, legal, and professional issues faced in environmental engineering; and 3) to provide graduates with a solid foundation for graduate studies, continuing education, and life-long professional development.

## 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 $\$ 8.0$ million to the San Diego Foundation. Mr. Blasker was a successful aeronautical engineer and a business man 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. Fatih Buyuksonmez, is an accomplished scholar in the area of solid and hazardous waste management.

## 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 $A B E T$, 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.

## General Education

Students will complete a minimum of 50 units in General Education, to include a minimum of nine upper division units taken after attaining junior class standing. No more than 12 units may be used for General Education credit from any one department or academic unit. No more than 7 units from one department can be used in Sections II and IV combined (Foundations of Learning and Explorations of Human Experience), nor more than 10 units from one department in Sections II, III, and IV combined (Foundations of Learning, American Institutions, and Explorations of Human Experience).
I. Communication and Critical Thinking: 9 units

You may not use Credit/No Credit grades in this section.

1. Oral Communication (3 units)
2. Composition (3 units)
3. Intermediate Composition and Critical Thinking (3 units)
II. Foundations of Learning: 29 units
A. Natural Sciences and Quantitative Reasoning (17 units):
4. Physical Sciences (11 units)

Engineering students will take Chemistry 202 (4 units) or Chemistry 200 (5 units).

Physics 195 (3 units)
Physics 195L (1 unit)
Physics 196 (3 units)
2. Life Sciences (3 units) Environmental engineering majors will take Biology 204.
3. Laboratory (satisfied under A.1. above)
4. Mathematics/Quantitative Reasoning Engineering students will take Mathematics 150, 3 units applicable to General Education. You may not use Credit/No Credit grades.
B. Social and Behavioral Sciences (3 units)
C. Humanities (9 units)

Complete three courses in three different areas. One of these courses and the one under IV.A. below must be taken in the same department.
III. American Institutions: Three units of the six units of coursework which meet the American Institutions graduation requirement may be used to satisfy this section, excluding courses numbered 500 and above.
IV. Explorations of Human Experience: Courses in this area must not be taken sooner than the semester in which you achieve upper division standing ( 60 units passed). Upper division courses in the major department may not be used to satisfy General Education. Total: 9 units; must include one course of cultural diversity.
A. Upper division Humanities (3 units)

Three units must be taken from the same department as one of the Humanities courses selected in Foundations of Learning.
B. Upper division Social and Behavioral Sciences (3 units).
C. Upper division Social and Behavioral Sciences (Engineering majors may satisfy this area with an additional American Institutions course (excluding 500-level) to complete the American Institutions requirement if this requirement was not completely satisfied with lower division coursework) (3 units).

## 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.

## 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 C or higher: 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 (Cr/NC);
b. Have an overall cumulative GPA of 2.5 .

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)

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; Aerospace Engineering 200 or Mechanical Engineering 200; Aerospace Engineering 220 or Mechanical Engineering 220; Biology 204, 204L; Chemistry 130, 202 (or 200); Civil Engineering 121, 160 (or Statistics 250), 220; Mathematics 150, 151, 252; Physics 195, 195L, 196, 197. (52 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 or higher. These courses cannot be taken for credit/no credit (Cr/NC).

General Education. Engineering students must follow the specific General Education program outlined in this section of the catalog. Other general education requirements and limitations, as well as listings of specific General Education course electives are presented in the General Education section of Graduation Requirements for the Bachelor's Degree.

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 Environmental Engineering 355, 356, 363, 441, 442, 495, 554, 556, 558; Aerospace Engineering 340; Biology 315; Civil Engineering 444, 462; Construction Engineering 430; Mechanical Engineering 350; and three units of professional electives selected from the following: Chemistry 571, Civil Engineering 445, 463, 530, Geological Sciences 530.

## Courses (enve)

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 <br> (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 environmenta 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 environmenta 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 441. Water Treatment Engineering (3)
Prerequisites: Environmental Engineering 355, credit or concurrent registration in Aerospace Engineering 340, Civil Engineering 444

Basic water chemistry; water quality criteria and standards; residential, industrial and commercial water usage; principles of physical and chemical processes employed in water treatment; design of selected water treatment units; new and emerging water treatment technologies; and water distribution systems.

## ENV E 442. Wastewater Treatment Engineering (3)

Prerequisite: Environmental Engineering 441
Wastewater collection, influent wastewater characteristics; effluen discharge requirements; principles of physical, biological, and chemical processes employed in wastewater treatment; design of selected wastewater treatment units; new and emerging wastewater treatment technologies; advanced treatment process; recycled water

ENV E 495. Capstone Design Project (3)
One lecture and six hours of laboratory
Prerequisites: Construction Engineering 430 and credit or concurrent registration in Environmental Engineering 442, 554, 556, 558. At least three of these courses must be completed prior to enrolling in Environmental Engineering 495.

Engineering principles and design techniques in design of environmental engineering projects.
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 Environmenta Engineering 496, 499 and 596.

## UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)
ENV E 554. Process Fundamentals of Environmental Systems (3)
Prerequisites: Minimum grade of C in Environmental Engineering 355, 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 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 Environmenta Engineering 496, 499 and 596 applicable to a bachelor's degree. Credit for 596 and 696 applicable to a master's degree with approva 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

## OFFICE: Physical Sciences 100 and 103 <br> TELEPHONE: 619-594-5386 <br> E-MAIL: envsci_info@sciences.sdsu.edu

The environmental sciences major is overseen by the College of Sciences and administered by the Environmental Sciences Program Committee. The program offers jointly, with the Department of Geography, a concentration in watershed science.

## Faculty

Environmental Sciences Program Director: Sweedler (Physics/ International Programs)
Undergraduate Advisers: Hope (Emphasis), Rahn (Major)
Environmental Sciences Program Committee: Atkins (Psychology), Deutschman (Biology), Ganster (Field Stations), Gersberg (Public Health), Hope (Geography), Maloy (Field Stations), Oechel (Biology), Rahn (Field Stations), Sweedler (Physics/International Programs), Thorbjarnarson (Geological Sciences)

## Offered by the College of Sciences

Major in environmental sciences with the B.S. degree in applied arts and sciences

Emphasis in watershed science.

## 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 and emphasis are impacted programs. To be admitted to the environmental sciences 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.

## 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 150, 151, Physics 195, 195L, 196, 196L, or Mathematics 122 or 124, Physics 180A, 180B, 182A, 182B. (33-38 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 isting 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

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, 538 [or Biology 538], 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.

## Emphasis in Watershed Science <br> (SIMS Code: 777005)

Environmental sciences has a strong geographic component Understanding how vegetation, soils, climate, water, and human activities interact within a spatial context is the basis for watershed analysis. Students in this emphasis will a) acquire a fundamental background in the scientific fields that contribute to watershed analysis (geology and geomorphology, hydrology, ecology, and climatology) and b) develop skills and techniques that are important in applying and integrating this knowledge within a spatial context to address watershed science and management challenges at local to regional scales.

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 Mathematics122 or 124, Physics 180A, 180B, 182A, 182B, or Mathematics 150, 151, Physics 195, 195L, 196, 196L. (33-38 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.

Major. A minimum of 40-41 upper division units to include Biology 354; Geography 380 or 381, 385, 401, 483, 484 or 591 and 591L, 495, 511; Geological Sciences 305; 15 units selected from the following courses, at least 12 units must be from 500-level courses selected from Environmental Science 301, 538 [or Biology 538], 544 [or Biology 544], Biology 531, 535, 540, Geography 370, 409, 570, 584, 592 and 592L, Philosophy 332 [or Sustainability 332], Public Administration 320.

## 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]
Prerequisite: 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 498A-498B. Senior Seminar in Environmental

 Sciences (3-3) Cr/NCPrerequisite: 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 538. Environmental Policy and Regulations (3)

(Same course as Biology 538)
Prerequisite: Biology 354.
History of biological conservation and environmental laws; regulations governing biological resources; role of biologists; environmental impact analysis, operation of regulatory and resource agencies; biologists as expert witnesses; wetland protection and mitigation, state heritage programs, role of nongovernmental agencies.

## ENV S 544. Terrestrial Ecosystems and Climate Change (3) <br> (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 544L. Global Change Science Laboratory (2) (Same course as Biology 544L)

Six hours of laboratory.
Prerequisite: Biology 354.
Ecological methods in ecosystem and climate change science to include chemical analysis (of stable isotopes and elements) and meteorological measurements. Modeling, data interpretation, and presentations.

# European Studies <br> In the College of Arts and Letters 

OFFICE: Storm Hall 224A<br>TELEPHONE: 619-594-5111 / FAX: 619-594-8006<br>E-MAIL: euro-studies@mail.sdsu.edu<br>http://www-rohan.sdsu.edu/~euro<br>\section*{Faculty}<br>Emeritus: Cornwell, Sacco<br>Chair: Donadey<br>Professors: Benkov, Donadey, Lyman-Hager, Schorr, Shapovalov<br>Associate Professors: Clò, Rebien, Wauchope<br>Assistant Professor: Matthews<br>\section*{Offered by the Department}<br>Major in European studies with the B.A. degree in liberal arts and sciences.<br>Major in Russian and Central European studies with the B.A. degree in liberal arts and sciences.<br>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 fulfil 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: 19-32 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: 10-23 units.)

French 100A, 100B, 201, 210, 220, 221. (22 units)
German 100A, 100B, 202, 205A, 205B. (21 units)
Italian 100A, 100B, 201, 211, 212. (21 units)
Portuguese 101, 201. (10 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 301, 401, and two additional three unit courses. Russian 301, 311, 430, and one additional three unit course. Spanish 301, 340, 405B, and Spanish 302 or 381 or 382.
III. European Studies Electives ( 6 units). Select six units from the following: European Studies 430, 435, 440, 501; Art559; Comparative Literature 514; 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, 320, 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 <br> 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 $(\mathrm{W})$ 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 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: European Studies 101 or completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

Contemporary Europe, emphasizing artistic, intellectual, and cultural trends, as well as contemporary issues.

## EUROP 424. European Cinema (3) [GE]

Two lectures and two hours of activity.
Prerequisite: European Studies 101 or completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

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: European Studies 101 or completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

Cross-cultural connections between the Muslim and JudeoChristian 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)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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) Cr/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 <br> (Also Acceptable for Advanced Degrees)

## EUROP 501. European Life and Culture (3)

Prerequisite: Undergraduate: European Studies 301 or completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 <br> TELEPHONE: 619-594-5541 <br> http://ens.sdsu.edu <br> Accredited by the Commission on Accreditation of Athletic Training Education for Athletic Training.

## Faculty

Emeritus: Aufsesser, Carter, Francis, P., Franz, Friedman, Harris, King, Landis, McKenzie, T., Mechikoff, Nichols-Bernhard, Patterson, Phillips, Rushall, Selder, Simmons, Sleet, Sucec, Wells, Williamson
Director: Kolkhorst
Professors: Buono, Enwemeka, Kahan, Kolkhorst, LaMaster, Levy, Rauh, Verity
Associate Professors: Lebsack, Maluf
Assistant Professors: Baweja, Cannon, Domingo, Goble, Gombatto, Kressler, Smith, Tuttle
Lecturers: Thurman, Voigt

## 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 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 rehabilitation, and human efficiency 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.

## 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
ENS 265 Care and Prevention of Athletic and
Recreational Injuries.
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................... 4

ENS 265L Care and Prevention of Athletic and Recreational Injuries Laboratory
Pre-Major Courses. Students are expected to have most, if no all, of the pre-major 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. Prerequisite Grade Point Average. Applicants must have a minimum prerequisite grade point average of 3.0. Prerequisite courses include BIOL 212, ENS 265, 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 2.75 or higher each semester enrolled in the professional program and clinically they must obtain a B 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 or higher: 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 or higher 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 (Cr/NC);
c. Have a cumulative GPA of 2.80 or higher. For the athletic training major, the GPA is also required for application submission and program consideration.
d. For the athletic training major, students must be accepted into the professional program.
e. 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 (Cr/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 courses cannot be taken for Credit/No Credit (Cr/NC). Exercise and Nutritional Sciences 200 must be completed with a grade of C or higher. 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 or higher.

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)

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 an 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 and community service activity in the U.S. 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;
5. General Studies 450;
6. Health and Human Services 350.

Major. A minimum of 47 upper division units to include Exercise and Nutritional Sciences 303, 304, 304L, 305, 306, 307, 365, 367, $367 \mathrm{~L}, 368,368 \mathrm{~L}, 389 \mathrm{~A}, 389 \mathrm{~B}, 389 \mathrm{C}, 389 \mathrm{D}, 401 \mathrm{~A}, 434$, 463, 463L, 465, 466; Biology 336; Nutrition 304. 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 or higher.

## 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 an 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 and community service activity in the U.S. 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;
5. General Studies 450;
6. Health and Human Services 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 <br> (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 an 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 and community service activity in the U.S. 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;
5. General Studies 450;
6. Health and Human Services 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 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.

## Emphasis in Prephysical Therapy <br> (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 and182B; 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 an 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 and community service activity in the U.S. 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;
5. General Studies 450;
6. Health and Human Services 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" courses in this section of the catalog.

ENS 104A-104B. Weight Training (1-1)
ENS 108. Basketball (1)
ENS 109A-109B. Soccer (1-1)
ENS 110. Volleyball (1)
ENS 116A-116B. Golf (1-1)
ENS 119A-119B. Bowling (1-1)
ENS 124. Sailing (1)
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 145. Wakeboarding and Waterskiing (1)

ENS 146. Surfing (1)
ENS 147. Windsurfing (1)
Theory and mechanical skills of windsurfing. Proper rigging, body position, and sailing theory, right-of-way rules and boating safety for good fundamental base to confidently continue.

## 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. Not open to students with credit in Exercise and Nutritional Sciences 210.
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.

## UPPER DIVISION COURSES <br> (Intended for Undergraduates)

ENS 301. Physical Growth and Development (3)
Prerequisites: Credit or concurrent registration in Exercise and Nutritional Sciences 200. Limited to kinesiology premajors, majors, and liberal studies majors. Major Codes: 08351, 49015, 49081

Principles of human growth; performance as affected by developmental levels and individual differences in structure and function.
ENS 302. Sociocultural History and Philosophy of Sport (3)
Prerequisites: Credit or concurrent registration in Exercise and Nutritional Sciences 200. Limited to kinesiology premajors and majors. Major Code: 08351

Integrated approach to understanding of historical, philosophical, and sociological forces shaping development of physical activity and sport.

## ENS 303. Applied Kinesiology (3)

Prerequisites: Grade of C 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 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: 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 330. Exercise and Wellness Across the Lifespan (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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 335. Basic Movement Skills (2)

Prerequisites: Credit or concurrent registration in Exercise and Nutritional Sciences 303 or Education 200 and Exercise and Nutritional Sciences 241A, 241B. Limited to kinesiology and liberal studies majors. Major Codes: 08351 and 49015.

Terminology, performance, and analysis of elementary-level movement skill themes and concepts, educational gymnastics, rhythms, and dance.

## ENS 337. Basic Manipulative Skills (2)

Four hours of activity.
Prerequisites: Credit or concurrent registration in Exercise and Nutritional Sciences 303 or Education 200 and Exercise and Nutritional Sciences 241A, 241B. Limited to kinesiology and liberal studies majors. Major Codes: 08351 and 49015.

Cues, progressions, and activities for propulsive, retentive, striking, and receptive skills.
ENS 347A. Leadership for Kinesiology (2)
Prerequisites: Credit or concurrent registration in Exercise and Nutritional Sciences 305 or Education 200 and Exercise and Nutritional Sciences 241A, 241B. Limited to kinesiology and liberal studies majors. Major Codes: 08351 and 49015.

Theory and development of leadership behavior of physical educators, emphasizing leadership qualities unique to diverse physical activity settings.

## ENS 347B. Leadership for Kinesiology Activity (1)

Two hours of activity.
Prerequisite: Credit or concurrent registration in Exercise and Nutritional Sciences 347A.

## ENS 360. Professional Issues (1) Cr/NC

Prerequisite: Junior standing in prephysical therapy specialization.
Current issues relevant for one preparing to enter an allied health profession. (Formerly numbered Exercise and Nutritional Sciences 460.).

ENS 363. Corrective Physical Education (3)
Prerequisite: Exercise and Nutritional Sciences 303.
Etiology, characteristics, and programs for children with corrective and/or physically handicapping conditions. Includes evaluating and implementing prescribed activities for individuals with these types of conditions.

## 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 or better in Biology 212, Exercise and Nutritional Sciences 265, 265L, application, letters of recommendation, and interview.

389B: Grade of B or better in Exercise and Nutritional Sciences 389A.
389C: Grade of B or better in Exercise and Nutritional Sciences 389B.
389D: Grade of B 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 in the College of Extended Studies)
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 431. Administration of Exercise and Fitness Program (2)
Prerequisites: Exercise and Nutritional Sciences 303, 304, 304L.
Administration and management of corporate, private, university-
based, and hospital-based exercise programs.

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, Sport, and Aging (3)

Prerequisite: Exercise and Nutritional Sciences 304.
Relationships between exercise, sport 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 or 388B.
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 Clinical Settings (2)

Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 440.

Androgogical 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 441. Practicum: Physical Education Activities (2)

Four hours of activity.
Prerequisites: Exercise and Nutritional Sciences 306, 347A, 347B.
Selection and care of equipment and facilities; analysis of skill; progression for skills, drills and the game; lead-up activities; safety; performance cues; terminologies; skill evaluations; tactics and strategies.
A. Sport Applications I
B. Sport Applications II

ENS 442A. Physical Education for Elementary Schools (2)
Prerequisites: Exercise and Nutritional Sciences 305, 335, 337, 347A, 347B.

Objectives, curricula, activities, and application of basic scientific principles for the conduct of physical education in elementary schools.

ENS 442B. Physical Education for Elementary Schools Activity (1)
Two hours of activity.
Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 442A.
ENS 445. Current Issues in Physical Education (2)
Prerequisite: Exercise and Nutritional Sciences 441A or 441B.
Current issues relevant to physical education. Includes assessment, liability, curriculum standards, appropriate physical activity levels, and safety.
ENS 446A. Physical Education with Adolescents (2)
Prerequisites: Exercise and Nutritional Sciences 441A or 441B; and 442A, 442B.

Basic requirements, principles, and concepts for conducting physical education with adolescents.
ENS 446B. Physical Education with Adolescents (1)
Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 446A.

Application of basic requirements, principles, and concepts for conducting physical education with adolescents.
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 (2)
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 department chair. Limited to kinesiology majors. Major Code: 08351

Individual study. Maximum credit six units.

## UPPER DIVISION COURSE <br> (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.

## Filipino

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
http://www-rohan.sdsu.edu/dept//inguist/index.html

## Faculty

Chair: Osman
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

## 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 equivalen of three college semesters, thus fulfilling the language requirement.

## Courses (fILP)

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.

Finance

## In the College of Business Administration

## OFFICE: Student Services East 3356 <br> TELEPHONE: 619-594-5323 / FAX: 619-594-3272

## 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: Block, Bost, Cherin, Gitman, Graf, Hippaka, Houston, Nye, Omberg, Reints, Sachdeva, Short, Sterk, Vandenberg, Warschauer, Wilbur
Chair: Salehizadeh
Professors: Badrinath, Do, Ely, Haddad, Salehizadeh, Song, Varaiya
Associate Professors: An, Gubellini, Kim, Lachance
Assistant Professors: Juneja, Lotfaliei, Tang

## 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 College of Business Administration, 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 College of Business Administration expects that all business students will make reasonable academic progress towards the degree. Business premajors who have completed major preparatory courses, 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.

## Business Passport

All majors in the College of Business Administration will be introduced to the Business Passport in Business Administration 310, and complete the Business Passport in the capstone course (Business Administration 404, 405, or 458). Contact the Business Advising Center (EBA-448), 619-594-5828, for more information.

## 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 College of Business Administration.

Upper Division: It is the policy of the San Diego State University College of Business Administration 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 or higher: 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 threeunit 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 Business Advising Center (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 or higher: 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. Business Administration 404, 405, or 458 (three units); and six units of 300-500 level 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 or higher: 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 326, 327, 331, 522, 589; Accountancy 503; Business Administration 300, 310, 323, 350, 360, 370. Business Administration 404, 405, or 458 (three units); and six to seven units selected from Finance 421, 427, 431, 435*, 585, 590; 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.

[^8]
## 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 or higher 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. Business Administration 404, 405, or 458 (three units); and nine additional units selected from Economics 458, Finance 421, 438, 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)

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 College of Business Administration, Hospitality and Tourism Management, or International Business should choose courses carefully with an adviser in their major department and the Business Advising Center (EBA-448).

Students must meet the prerequisites for the minor in effect at the time that they declare the minor. Contact the Business Advising Center (EBA-448) for admissions criteria and procedures.

* Business Administration 323 waived for College of Business Administration, 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)

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, 438.

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 College of Business Administration, Hospitality and Tourism Management, or International Business should choose courses carefully with an adviser in their major department and the Business Advising Center (EBA-448).

Students must meet the prerequisites for the minor in effect at the time that they declare the minor. Contact the Business Advising Center (EBA-448) for admissions criteria and procedures.

* Business Administration 323 waived for College of Business Administration, Hospitality and Tourism Management, and International Business majors.


## 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 College of Business Administration 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, 522, 585, 589, 590, and either Finance 421 or 427; Accountancy 503; and Business Administration 323. In order to qualify for this certificate, a "B-" (2.7) 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 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 <br> (Intended for Undergraduates)

FIN 321. Managerial Economics (3)
Prerequisites: Accountancy 202; Finance 240; Management Information Systems 180. Approved upper division business major, business minor, or another major approved by the College of Business Administration. Proof of completion of prerequisites 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)

Prerequisites: Accountancy 202; Finance 240; Management Information Systems 180. Completion of lower division course requirements in business major or minor. Proof of completion of prerequisites 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 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 431 or 433. Proof of completion of prerequisite required: Copy of transcript.

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)

Prerequisites: Finance 431; or Finance 325 and 327. Proof of completion of prerequisites required: Copy of transcript.

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 438. Mortgage Banking (3)
Prerequisites: Finance 431; or Finance 325 and 326. Proof of completion of prerequisites required: Copy of transcript.

Financing of commercial and residential real estate. Reviews operation and organization of primary and secondary markets for debt and equity financing instruments. Topics include loan origination, underwriting, servicing and default management, securitization and REITs.

## 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 . (Formerly numbered Finance 485.)

## 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 College of Business Administration 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.

## French

## 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: french.coord@sdsu.edu
http://www-rohan.sdsu.edu/~frenital/

## Faculty

Emeritus: Cornwell, Cox, Ghilbert, Jackson, Nelson, Palmer, Sacco

## Chair: Donadey

Professors: Benkov, Donadey, Lyman-Hager, Schorr Lecturers: Ransom, Wilson

## 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 partic ipate in either the SDSU spring semester in Paris or the CSU-IP (California State University International Programs) study abroad programs 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;
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 49 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, 220, and 221. (22 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 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, 220, 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, 220 and/or 221. No credit will be awarded for any of these courses completed out of sequence. French 200 and 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 200. Intermediate French in Paris (3)

Four hours per week in a 12 week period in the Paris Semester.
Prerequisite: French 100B or three years of high school French.
Development of intermediate level proficiency skills through lecture and work in small groups. Offered only through the Paris Semester study abroad program. This course satisfies the language graduation requirement.

## 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 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 220. Grammar of Spoken French (3) [GE]

Prerequisite: French 210.
Analysis of grammar and use of modern French through study of cultural materials, for proficiency in oral communication. Note: French majors, minors, and International Business majors are encouraged to enroll concurrently in French 221.

## FRENC 221. Writing French (3) [GE]

Prerequisite: French 210 with a grade of C or better.
Emphasis on written composition: study of a variety of prose models and practice in writing. Note: French majors, minors, and International Business majors are encouraged to enroll concurrently in French 220.

## 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]
Prerequisites: Minimum 12 units of 200-level French, to include French 221 with a grade of C or better, and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

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 not be taken concurrently or out of sequence.
FRENC 302. Advanced Grammar and Translation (3) [GE]
Prerequisites: French 301 with a grade of C or better, and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

Advanced grammar and comparative stylistics of French and English, taught through translation. French 301 and 302 may not be taken concurrently or out of sequence.

## 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: Twelve units of 200-level French, and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

Important movements, authors, and works in French literature from the Middle Ages to the Revolution.

## FRENC 305B. Survey of French Literature (3) [GE]

Prerequisites: Twelve units of 200-level French, and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

Important movements, authors, and works in French literature from the Revolution to present.

## FRENC 400. Advanced French in Paris (3)

Prerequisite: Twelve 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: Twelve units of 200-level French, and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

French civilization from Middle Ages to the present. Artistic, intellectual achievements and cultural movements.

## FRENC 422. Contemporary France (3) [GE]

Prerequisites: Twelve units of 200-level French, and completion of the General Education requirement in Foundations of Learning II.C. Humanities for nonmajors.

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.
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

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)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

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) Cr/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 Mathematics Studies

In the College of Arts and Letters

## OFFICE: Storm Hall West 141

TELEPHONE: 619-594-2225 / FAX: 619-594-6530

## Faculty

Chair: McClish
Lecturers: Morgan, Quan

## Offered by the Department of Rhetoric and Writing Studies

Courses in general mathematics studies.
Major or minor work in general mathematics studies is not offered.

## General Information

The principal role of the General Mathematics Studies program is to prepare students to satisfy the CSU Entry Level Mathematics requirement and to prepare students to succeed in their GE entry level Mathematics course. Receiving a credit in General Mathematics Studies 91 satisfies the ELM requirement*. For more information on these mathematics requirements, refer to the "Graduation Requirements" section of this catalog.

The General Mathematics Studies program offers one unit workshops in geometry and other selected topics in mathematics.

The units awarded to a student who earns a grade of "Credit" in a General Mathematics Studies course are not applicable to the baccalaureate degree.

* The ELM requirement is satisfied by this course only if the student has already attempted and failed the ELM.


## Courses (Gms)

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 (Non-Baccalaureate Credit)

Beginning with the class of 2012, the California State University (CSU) has enacted a systemwide mandatory Early Start Program for entering resident CSU freshmen who need remediation in mathematics. Students attending another CSU campus may enroll in the Early Start Program at SDSU. The following course is being offered for service students needing remediation who are enrolling in another CSU campus in the fall semester.

## ESM 96. Algebra Review (1) Cr/NC

Prerequisite: A score of 49 and below on the ELM.
Mini-course reviewing basic number sense, data analysis, geometry, and topics from algebra. Meets CSU Early Start Program requirement for CSU students (not continuing at SDSU).

## LOWER DIVISION COURSES (Non-Baccalaureate Credit)

General mathematics studies courses numbered below 100 may not be used to satisfy general education or graduation requirements.
GMS 90. Fundamentals of Mathematics (3) Cr/NC
Prerequisite: A score below 41 on the CSU Entry-Level Mathematics Examination (ELM), the General Mathematics Studies diagnostic test, or other standardized mathematics examination

Review of pre-algebra and elementary algebra in fall and spring semesters, topics from geometry covered in adjunct workshops (General Mathematics Studies 98A). Students earning "Cr" (credit) should enroll in General Mathematics Studies 91. Students earning "NC" (no credit) should repeat General Mathematics Studies 90. May be repeated with consent of instructor. Maximum credit six units.

## *GMS 91. Intermediate Algebra (3) Cr/NC

Prerequisite: Credit in General Mathematics Studies 90 or a score of $41-49$ on the ELM.

A review of intermediate algebra skills. Topics include polynomials rational and radical expressions, complex numbers, linear and quadratic equations (and graphs), systems of equations, set and function notation, conic sections, exponential and logarithmic functions and sequences and series. Credit in General Mathematics Studies 91 satisfies the Entry Level Mathematics Examination requirements.

## GMS 98. Mini-Course: Selected Topics (1) Cr/NC

Assorted short courses which will cover a variety of general mathematics skills through intensive lectures and laboratory work. Suggested topics: Communication skills, research tools, and learning skills. See Class Schedule for specific content. Credit earned in courses from this series is not applicable to a bachelor's degree.
A. Geometry Workshop
B. Selected Mathematics Topics

[^9]
## General Studies

## 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) Cr/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 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 Undergraduate Studies, 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 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) Cr/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.

## UPPER DIVISION COURSES (Intended for Undergraduates)

GEN S 330. Plagues Through the Ages (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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.

## 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 Undergraduate Studies, 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 410. Civilization Through Travel-Study (2-3)

Prerequisite: Upper division standing.
Civilization through faculty-supervised foreign travel-study. Requires lecture attendance, excursions and site visits, examinations and written reports.

## GEN S 420. Disability and Society (3) [GE]

Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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]

Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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 minimum grade point average of 2.0, and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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 <br> In the College of Arts and Letters 

## OFFICE: Storm Hall 314 <br> TELEPHONE: 619-594-5437 / FAX: 619-594-4938

## Faculty

Emeritus: Aguado, Fredrich, Getis, Greenwood, Griffin, Johnson, Keen, McArthur, Pryde, Quastler, Stutz, Weeks, Wright
Chair: Jankowski
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, Bosco, Christakos, Hope, Jankowski, O'Leary, Skupin, Stow, Tsou
Associate Professors: Biggs, Farley, Marcelli, Swanson
Assistant Professors: Debbané, Levine, Nara
Lecturers: Herman, Osborn, Pohl-Costello, Richardson, 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 foundations of geography.
Major in geography with the B.A. degree in liberal arts and sciences. Emphasis in environment and society.
Emphasis in human geography and global studies.
Emphasis in integrative geography.
Emphasis in methods of geographic analysis.
Major in geography with the B.S. degree in applied arts and sciences.
Emphasis in environmental and physical geography.
Emphasis in geographic information science.
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 Youth and Space (ISYS), 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:

## Foundations of 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 (AA-T) 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 and Society

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.

## 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.

## Integrative Geography

This is a comprehensive program in geography, which integrates topics from all of the emphases and requires students to minor in a related discipline. Students in this emphasis will learn about the various fields of geography, including human and physical geography, and its diversity of methods, such as mapping, spatial statistics, modeling, and qualitative data analysis. It allows students to specialize in a given area of interest through electives and to make connections with other disciplines with a minor.

## Methods of Geographic Analysis

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, which requires additional courses in computer science.

## Environmental and Physical Geography

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.

## Geographic Information Science

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.

## 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, 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 letters 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 Foundations of Geography <br> (SIMS Code: 112911)

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 508W, $581 \mathrm{~W}, 584 \mathrm{~W}$, 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 32 upper division units in geography to include:

1. 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);
2. Fifteen units of core courses, 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, 353, 354, 440 [or Political Science 440], 454, 554, 556, 558, 573; (c) Environmental and Physical Geography: Geography 303, 340, 370, 375, 401, 409, 440 [or Political Science 440], 454, 483, 506, 507, 509, 511, 512, 570, 572-575; (d) Methods: Geography 380, 381, 385, 484, 581, 583-586, 589-592L;
3. Fifteen units from Geography 300 to 599 (if not taken above). Field and research experience (Geography 426, 590) and internships (Geography 595) are encouraged. International units can 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 48 units in geography courses can apply to the degree for students with an emphasis in environment and society or the emphasis in integrative geography. For students with an emphasis in human geography and global studies or the emphasis in methods of geographic analysis, no more than 51 units in geography courses can apply to the degree.

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 and Society <br> (SIMS Code: 112916)

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; Biology 100 and 100L; Political Science 102; Statistics 250 or comparable statistics course. (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 English 508W, 581W, 584W, 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 35 upper division units in geography to include:

1. 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);
2. Fifteen units of core courses, 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, 353, 354, 440 [or Political Science 440], 454, 554, 556, 558, 573; (c) Environmental and Physical Geography: Geography 303, 340, 370, 375, 401, 409, 440 [or Political Science 440], 454, 483, 506, 507, 509, 511, 512, 570, 572-575; (d) Methods: Geography 380, 381, 385, 484, 581, 583-586, 589-592L;
3. Fifteen units of core courses listed above in group (c), if not already taken;
4. Three units from core courses listed above in (a), (b), or (d), if not already taken. Field and research experience (Geography 426,590 ) and internships (Geography 595) are encouraged. International units can 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; 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, $581 \mathrm{~W}, 584 \mathrm{~W}$, 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.

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 38 upper division units in geography to include:

1. 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);
2. Fifteen units of core courses, 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, 353, 354, 440 [or Political Science 440], 454, 554, 556, 558, 573; (c) Environmental and Physical Geography: Geography 303, 340, 370, 375, 401, 409, 440 [or Political Science 440], 454, 483, 506, 507, 509, 511, 512, 570, 572-575; (d) Methods: Geography 380, 381, 385, 484, 581, 583-586, 589-592L;
3. Fifteen units of core courses listed above in group (b), if not already taken;
4. Six units from core courses listed above in groups (a), (c), or (d), if not already taken. Field and research experience (Geography 426,590) and internships (Geography 595) are encouraged. It is recommended that students seek units from international experience to meet this requirement when appropriate and preapproved by the undergraduate adviser.

## Emphasis in Integrative Geography

(SIMS Code: 112915)
A minor in another department approved by the undergraduate adviser in geography is required for this degree.

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, 503W with a grade of C (2.0) or better. See "Graduation Requirements" section for a complete listing of requirements.

International Experience. Students are encouraged to pursue an international experience to increase their 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 26 upper division units in geography to include:

1. 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);
2. Fifteen units of core courses, 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, 353, 354, 440 [or Political Science 440], 454, 554, 556, 558, 573; (c) Environmental and Physical Geography: Geography 303, 340, 370, 375, 401, 409, 440 [or Political Science 440], 454, 483, 506, 507, 509, 511, 512, 570, 572-575; (d) Methods: Geography 380, 381, 385, 484, 581, 583-586, 589-592L;
3. Nine units from Geography 300 to 599 (if not taken above). Field and research experience (Geography 426, 590) and internships (Geography 595) are encouraged. International units can be used to meet this requirement when appropriate and preapproved by the undergraduate adviser.

## Emphasis in Methods of Geographic Analysis

## (SIMS Code: 112954)

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, $581 \mathrm{~W}, 584 \mathrm{~W}$, 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:

1. 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);
2. Fifteen units of core courses, 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, 353, 354, 440 [or Political Science 440], 454, 554 556, 558, 573; (c) Environmental and Physical Geography: Geography 303, 340, 370, 375, 401, 409, 440 [or Political Science 440], 454, 483, 506, 507, 509, 511, 512, 570, 572-575 (d) Methods: Geography 380, 381, 385, 484, 581, 583-586, 589-592L;
3. Eighteen units of core courses listed above in group (d), if not already taken;
4. Six units from core courses listed above in groups (a), (b), or (c), if not already taken. Field and research experience (Geography 426, 590) and internships (Geography 595) are encouraged. International units can 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 Environmental and Physical Geography (SIMS Code: 112989)

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; Mathematics 122, 124, or 150; Biology 100, 100L; Chemistry 200; Physics 180A, 182A; Statistics 250 or comparable statistics course. (32 units)

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or English 508W, $581 \mathrm{~W}, 584 \mathrm{~W}$, 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 38 upper division units in geography to include:

1. 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);
2. Fifteen units of core courses, 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, 353, 354, 440 [or Political Science 440], 454, 554 556, 558, 573; (c) Environmental and Physical Geography: Geography 303, 340, 370, 375, 401, 409, 440 [or Political Science 440], 454, 483, 506, 507, 509, 511, 512, 570, 572-575 (d) Methods: Geography 380, 381, 385, 484, 581, 583-586, 589-592L;
3. Fifteen units of core courses listed above in group (c), if not already taken
4. Six units from core courses listed above in groups (a), (b), or (d), if not already taken. Field and research experience (Geography 426, 590) and internships (Geography 595 are encouraged. International units can be used to meet this requirement when appropriate and preapproved by the adviser.

## Emphasis in Geographic Information Science

## (SIMS Code: 112990)

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; Chemistry 200; Computer Science 107, 108; Mathematics 122, 124, or 150; Physics 180A, 182A; Statistics 250 or comparable statistics course. (35 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, 503W 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 geography to include

1. 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);
2. Fifteen units of core courses, 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, 353, 354, 440 [or Political Science 440], 454, 554 556, 558, 573; (c) Environmental and Physical Geography Geography 303, 340, 370, 375, 401, 409, 440 [or Politica Science 440], 454, 483, 506, 507, 509, 511, 512, 570, 572-575 (d) Methods: Geography 380, 381, 385, 484, 581, 583-586 589-592L;
3. Fifteen units of core courses listed above in group (d), if not already taken;
4. Three units from core courses listed above in groups (a), (b) or (c), if not already taken. Geography 496, 498, 499, 590 595, 596 or qualifying international experience may be used to satisfy units within this category when appropriate and approved by the adviser;
5. Three units from Computer Science 310 or 320 (or comparable course approved by the 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: 112954): 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, 370, 375, 426, 440 [or Political Science 440], 483, 570-575, 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, 554-558, 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, 581-592, and 12-15 units selected from Computer Science 107, 108, 310, 320, 503, 514 520, 535, 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.

[^10]
## 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. Note: Cannot be used for General Education in combination with Anthropology 101.
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. Note: Cannot be used for General Education in combination with Anthropology 101.

## GEOG 104. Geographic Information Science and Spatial Reasoning (3) [GE]

Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.

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 context. 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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors. 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: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors. 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: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors. 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 sociospatial inequality.

## GEOG 336. Europe (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors. 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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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 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: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors. 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]

Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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 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 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 483. Watershed Analysis (3)

Prerequisite: Geography 101.
Watershed analysis is an organizing framework for collecting and analyzing scientific information to facilitate environmenta management. Framework examined from both an ecological process and an environmental management perspective.

## 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 or higher 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 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.
The natural vegetation associations of the world, their distribution, classification and development, including relationship to human activities. Field trips may be arranged.

## GEOG 509. Regional Climatology (3)

Prerequisite: Geography 101 or 103.
The causes of climatic types as they occur throughout the world Principles of several climatic classifications.
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 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 556. Cultures of Cities (3)

Prerequisite: Geography 354 or three units of upper division coursework in a related field.

Character and internal structure of North American cities with a focus on cultures (political, social ethnic, business, architectural) that shape them. Topics include immigrant neighborhoods, gentrification, gated communities, and processes of decline and revitalization. Field trips may be arranged.

## GEOG 558. Geographies of Poverty (3)

Prerequisite: Geography 354.
Geographic analysis of poverty in the United States: definitions and representations of poverty; spatial distribution and concentration; causes of poverty to include class, race, ethnicity, and gender; spaces of poverty (re)production such as neighborhoods, homes, schools, and workplaces; anti-poverty policies and responses.

## 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) <br> 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 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 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 decision support techniques for problem-solving and decision-making. Optimization and multiple criteria evaluation. Collaborative use of GIS for location-based planning and resource management.

## 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 591 L .
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 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

## OFFICE: Geology/Mathematics/Computer Science 237 <br> TELEPHONE: 619-594-5586 / FAX: 619-594-4372 <br> E-MAIL: geology@sdsu.edu <br> http://www.geology.sdsu.edu

## Faculty

Emeritus: Abbott, Bertine, Dorman, Huntley, Jiracek, Kern,
Krummenacher, Marshall, Miller, Peterson, Ptacek, Wallace
Chair: Kimbrough
The Rollin and Caroline Eckis Chair in Seismology: Day
Professors: Day, Frost, Girty, Kimbrough, Olsen, Rockwell, Schellenberg
Associate Professors: Ma, Thorbjarnarson
Assistant Professor: Maloney
Lecturers: Camp, Robinson, SacramentoGrilo

## 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 B. 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 fulfil 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 geologica 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, 498A, 498B, 508, 530, 537; and six 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; Biology 100; Chemistry 200; Aerospace Engineering 200 or Mechanical Engineering 200; Mathematics 150, 151, 252; Physics 195, 196, 197. (43 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 $(\mathrm{W})$ 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, 498A, 498B, 508 (4 units); Civil Engineering 301 or Mechanical Engineering 304, Civil Engineering 462, 463; two courses selected from Geological Sciences 514, 530, 550, 551, 560 or Civil Engineering 465; or other upper division courses approved by the department.

## Emphasis in Environmental Geosciences (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, 232, 232L; Mathematics 124 or 150; Physics 180A, 180B, 182A, 182B. (40 units)

Recommended: Geological Sciences 205, Chemistry 251, 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, 498A, 498B, 505, 514, 530, 551; and nine upper division units selected from Geological Sciences 300, 303, 305, 499, 508 (4 units), 520, 521, Environmental Science 301, Geography 370, Philosophy 332 [or Sustainability 332], Political Science 334 [or Sustainability 334].

## Emphasis in Geophysics <br> (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; Biology 100 or 101; 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. (42 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, 498A, 498B, 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 six upper division units of approved courses in geological sciences at the 500 level.

* Additional prerequisites required.


## Emphasis in Hydrogeology <br> (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: 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, 498A, 498B, 508 (4 units), 514 or 530, 551; and five upper division units of departmentally approved courses.

## Emphasis in Paleontology <br> (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, 498A, 498B, 508 (4 units), 537; Biology 352, 354; and nine 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. Chemistry 200 and 201, or any two of the following: Biology 100, 101, Chemistry 100, 200. (23-29 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 or 520 or 537, Oceanography 320, and 12 additional units selected from Geological Sciences 301, 305, 306, 324, 412, 496, 499, 505, 508, 514, 520, 521, 530, 537, 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.

## 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.

## 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.
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) <br> 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) Cr/NC <br> Prerequisite: Nine upper division units in geological sciences.

Development and testing of scientific hypotheses and their effective communication through oral, written, and visual modes. To be taken in fall semester of senior year prior to registration in Geological Sciences 498B, Senior Thesis.

## 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 <br> (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 520. Economic Geology (3)

Prerequisite: Geological Sciences 200.
Origin and distribution of mineral deposits, economic consider-
ations involved in their recovery, and assessment of available reserves.

## 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 537. Geobiology (3)

Two lectures and three hours of laboratory.
Prerequisites: Geological Sciences 205 and either Biology 100-100L, 101-101L or 203-203L, and Geological Sciences 336.

Principles of paleontology, including ecology and evolution. Tools of paleontology, including biomechanics, shape analysis, phylogeny, population analysis, study of biogeographic, temporal, and environmental distribution. Focus on using biology to solve geologic problems and vice versa.
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
http://www-rohan.sdsu.edu/~berlin

## Faculty

Emeritus: Skwara
Chair: Donadey
Associate Professors: Rebien, Wauchope
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 chemistry, medicine, military science, history, linguistics, art, physics, electronics, photography, and the natural sciences.

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 trade, international law, librarianship, public administration, and journalism.

A knowledge of German is a valuable asset in finding positions as interpreters and translators employed by the federal government, the United Nations, international conferences, trade councils, and publishers, as well as with internationally oriented companies, government agencies, the press corps, and the tourism industry.

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 Germanspeaking 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 320, 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. Introduction to German Studies (3) [GE]

Introduction to field of German studies with emphasis on cultural life of German-speaking communities and their impact worldwide on major artistic, intellectual, and cultural movements. 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 <br> \section*{Culture (3) [GE]}

Prerequisites: German 202, 205B, and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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, 205B, and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. 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
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 German-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 German-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 Germanspeaking regions, while building on advanced language skills. May be repeated with new title and content. Maximum credit six units.

## 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 501. Translation (3)

Prerequisites: German 300 and 301.
Translation of a variety of texts from German to English and English to German.

## GERMN 520. Modern German Literature (3)

Prerequisites: German 300 and 301.
Major authors and genres since Enlightenment.
GERMN 575. Seminar in German Studies (3)
Prerequisite: 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
In the College of Health and Human Services

## OFFICE: Hepner Hall 119

TELEPHONE: 619-594-6865 / FAX: 619-594-5991
Director of School: Melinda M. Hohman

## Faculty

Emeritus: DuBois, Harbert, Stanford
Professor: Garrett
Associate Professors: Ko, Min
Assistant Professor: 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 in the College of Extended Studies).

## 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, intervention 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, intervention 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 two semesters after declaration or change of major.

## 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: 21043) (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 the 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 an 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 and community service activity in the U.S. 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;
5. General Studies 450;
6. Health and Human Services 350.

Major. A minimum of 36 upper division units to include Gerontology 350, 360, 370, 400A, 402, 520, Social Work 381, 391; and 12 units selected with approval of the adviser from Gerontology 400B, 496, 499, and 596 (when appropriate); Exercise and Nutritional Sciences 433; General Studies 420; Psychology 380; 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, 350, 360, 370, 400A, 402, 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 in the College of Extended Studies)

## (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 the College of Extended Studies 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 the College of Extended Studies. Admission applications may be obtained from the College of Extended Studies. 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 the College of Extended Studies.

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 the following areas inclusive of the practicum:

## I. Introduction to Gerontology

Gerontology 101. Introduction to Human Aging (3)
II. Psychological Aspects of Aging

Psychology 350. Abnormal Psychology (3)
III. Sociological Aspects of Aging

Gerontology 250. Intergenerational Issues and the Elderly (3)
Gerontology 350. Social Policy and Aging (3)

## IV. 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 402. Aging Network (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 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: Gerontology 101 or completion of the General Education requirement in Foundations of Learning IIB, Social and Behavioral Sciences required for nonmajors.

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: Gerontology 101 or completion of the General Education requirement in Foundations of Learning IIB, Social and Behavioral Sciences required for nonmajors.

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 400A-400B. Practicum in Gerontology (3-3) Cr/NC

Two hundred hours of internship.
Prerequisites: Gerontology 350, 360, 370.
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 Science - Refer to "Public Health" in this section of the catalog.

## Health and Human Services

## Offered by the College of Health and Human Services

OFFICE: Education 154
TELEPHONE: 619-594-6151

## FAX: 619-594-7103

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 an 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 and community service activity in the U.S. 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;
5. General Studies 450;
6. Health and Human Services 350.

## Courses (Hнs)

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

## 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: Completion of the General Education requirement in Foundations of Learning II.B. Social and Behavioral Sciences. See Class Schedule for additional prerequisites.

Examine economic, political, cultural, environmental, health and human services challenges, and variations with respect to disease, mental health, and poverty in a designated non-Western region or country in Asia, Africa, Central and South America.

## Hebrew

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
http://www-rohan.sdsu.edu/dept/linguist/index.html

## Faculty

Emeritus: Bar-Lev
Chair: Osman
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, 200, 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 200. Reading Classical Hebrew (1)

Prerequisite: Knowledge of the Hebrew alphabet.
Continuation of Hebrew 100. Reading in Hebrew of short selections from Hebrew Bible and Prayerbook, study of songs, reading of simple stories. Focus on learning Hebrew roots and affixes through readings.

## HEBRW 201. Intermediate Hebrew (4) [GE]

Four lectures and one hour of laboratory.
Prerequisites: Hebrew 102 and 200.
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.

## History

## In the College of Arts and Letters

## OFFICE: Arts and Letters 588

TELEPHONE: 619-594-5262 / FAX: 619-594-2210
http://www-rohan.sdsu.edu/~histweb/

## Faculty

Emeritus: Baron, Bartholomew, Jr., Cheek, Christian, Chu, Cox, Cunniff, Davies, DuFault, Dunn, Filner, Flemion, Hamilton, Hanchett, Heinrichs, Heyman, Hoidal, Kushner, McDean, Norman, O'Brien, Polich, Smith, C., Smith, R., Starr, Stites,
Stoddart, Strong, Vartanian, Webb

## Chair: Ferraro

The Dwight E. Stanford Chair in American Foreign Relations: Cobbs
Professors: Beasley, Blum, Cobbs, Elkind, Ferraro, Kornfeld, Kuefler, Wiese
Associate Professors: Colston, DeVos, Edgerton-Tarpley, Passananti, Pollard, Putman, Yeh
Assistant Professors: Ben, Frieberg, Penrose
Lecturers: Hay, Mahdavi-Izadi, Nobiletti, Roy

## 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 holder of the Chair is Dr. Elizabeth A. Cobbs, a distinguished scholar-teacher who is an expert on economic and political relations between the United States and the Third World, and on the history of the Cold War.

## 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 recorded past, encompassing almost all aspects of human activity and behavior. The arts, sciences, technology, economics, politics, war, ideology, and social attitudes all constitute the subject of history.

The purpose of history education is not primarily the accumulation of information on particular events, regions, or cultures, but rather the development of knowledge and skills to collect and sift historical evidence, analyze and interpret historical behavior, and apply historical understanding to self-transformation and civic participation. Study of the ideas, attitudes, and actions of people in the past sharpens a person's own sense of values, provides a context for present decision making, and cultivates a more compassionate spirit toward peoples whose way of life may be different from one's own.

The training in basic skills and the broad range of knowledge students receive in history courses prepare history majors for a wide variety of careers in law, government, politics, journalism, publishing, private charities and foundations, public history, business, and science. Teaching at the primary to university levels also offers opportunity for history majors who continue their education at the graduate level.

## 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 or higher: History 100, 101, and six units selected from History 105, 106, 109, or 110. 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 higher.

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 units selected from History 105, 106, 109, 110. (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 or higher 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 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 to include History 400; three units from History 450, 451, or 452. In addition, 24 upper division units in history must be completed from the following fields:

Field (A). Thematic, Comparative, and Interdisciplinary History: Six units selected from History 402, 406, 422, 435, 436, 440, 441, 442, 486, $488,495,496,499,500,514,516,527,538,548,580,581,582,583$, 584, 586, 596.

Field (B). The Ancient Through Early Modern World: Six units selected from History 407, 411, 415, 420, 473, 496, 499, 501, 502, 503, 504, 505, 506, 507, 508, 528, 532, 550, 566

Field (C). The Modern World: Six units selected from History 408, $410,412,416,418,421,445,474,496,499,509,512 A, 512 B, 535$, $536,537,539,540,544 \mathrm{~A}, 544 \mathrm{~B}, 545,551,557,558,567,570,574,585$.

At least three upper division units selected from History 420, 421, $473,474,501,566,567,570$. Students may also fulfill this requirement by taking the following topics courses with the approval of the undergraduate adviser: History 500, 580, 583, 586. Courses completed to satisfy this requirement may also be counted towards Field (A), Field (B), or Field (C) requirements

An additional six units must be selected from any combination of courses in Field (A), Field (B), or Field (C).

At least 15 upper division units must be at the 500-level. Up to six units from other departments may be applied to the history major upon written approval of the undergraduate adviser. Up to six units of study abroad history courses may be applied to the history major upon prior written approval of the undergraduate adviser. It is the student's obligation to determine which courses fulfill his/her field requirements.

NOTE: Courses for Field (A), Field (B), or Field (C) are identified in the course title as (A), (B), or (C).

## History Minor

## (SIMS Code: 113301)

The minor in history consists of a minimum of 18 units in history to include six sequential units in the lower division. Twelve units must be in upper division history, including three units at the 500-level, distributed in no more than two of the fields listed under the history 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.

## 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 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) [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) [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 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)

NOTE: Courses for Field (A) Thematic, Comparative, and Interdisciplinary History; or Field (B) The Ancient Through Early Modern World; or Field (C) The Modern World, are identified in the course title as (A), (B), or (C).
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 C or higher in Rhetoric and Writing Studies 280, 281, or Linguistics 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition 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 Composition 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 (A) (3) [GE]

Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 406. History of Sexuality (A) (3) [GE]

Prerequisites: Upper division standing and completion of General Education requirements in Foundations of Learning II.C. Humanities required for nonmajors.

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 (B) (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 (C) (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Modern Europe from French Revolution to present. Social, cultural, economic, political, and intellectual trends, development of nationstates, and sources of continental conflict.

## HIST 410. United States History for Teachers (C) (3) [AI]

Prerequisites: Upper division standing and Writing Placement Assessment with a score of 8 or above or grade of C or better in Linguistics 281 or Rhetoric and Writing Studies 280 or 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 (B) (3)

Prerequisites: Upper division standing, Writing Placement Assessment with a score of 8 or above or grade of C or better in Linguistics 281 or Rhetoric and Writing Studies 280 or 281, and at east 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 (C) (3)

Prerequisites: Upper division standing, Writing Placement Assessment with a score of 8 or above, or grade of C or better in Linguistics 281 or Rhetoric and Writing Studies 280 or 281, and at east 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)

Prerequisites: Upper division standing and Writing Placement Assessment with a score of 8 or above or grade of C or better in Linguistics 281 or Rhetoric and Writing Studies 280 or 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 (B) (3) [GE]

 (Same course as Latin American Studies 415)Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Indigenous and colonial history of Latin America, pre-contact through early national period

## HIST 416. Modern Latin America (C) (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

History of Latin America, early national period to present.

## HIST 418. History of Modern Britain (C) (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 (B) (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 (C) (3) [GE]

(Same course as Asian Studies 421)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors

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 (A) (3) [GE]
(Same course as Asian Studies 422)
Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 435. History Through Film (A) (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 (A) (3) [GE]
Two lectures and two hours of activity.
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors

Representations of twentieth-century Jewish history in feature films. Topics include persecutions of Jews in Czarist Russia and Naz occupied Europe, social mobility in the United States and national sovereignty in Israel.

## HIST 440. The Holocaust and Western Civilization (A) (3) [GE

Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

German campaign to eliminate Jews during World War II. Antisemitic background, both Christian and racial; rise of Adolf Hitler and implementation of "the final solution"; responses by Jews and non-Jews in the Western world.

## HIST 441. Unnatural Disasters: History of Current Environmental Problems (A) (3) [GE]

Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 (A) (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 (C) (3)

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. Not open to students with credit in History 444 and 445 if both courses were taken prior to fall 2004.

## 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 473. Middle Eastern History from the Advent of Islam to

 1500 (B) (3) [GE]Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. 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 (C) (3) [GE]

Prerequisite: Completion of the General Education requirement
in Foundations of Learning II.C., Humanities required for nonmajors.
Middle Eastern history since 1500 C.E.; Islamic empires, European colonialism, nationalism, and modernization.

## HIST 486. World War II (A) (3)

Causes of World War II, its course, and its legacy for today's world.

## HIST 488. Modern Jewish History (A) (3) [GE]

Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Social, religious, and intellectual life of European Jewry from Middle Ages to present; political struggle for emancipation; antiSemitism, 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 (A) (3)

Prerequisite: 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 (A) (B) (C) (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. Refer to Class Schedule for specific content.
A. Thematic, Comparative, and Interdisciplinary History
B. The Ancient Through Early Modern World
C. The Modern World

HIST 499. Special Study (A) (B) (C) (1-3)
Prerequisites: Consent of department chair and instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES <br> (Also Acceptable for Advanced Degrees)

NOTE: Courses for Field (A) Thematic, Comparative, and Interdisciplinary History; or Field (B) The Ancient Through Early Modern World; or Field (C) The Modern World, are identified in the course title as (A), (B), or (C).
HIST 500. Topics in Ancient History (A) (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 GrecoRoman 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 (B) (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 (B) (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 (B) (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 (B) (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 (B) (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 (B) (3)

(Same course as Humanities 506)
Intellectual, artistic, social, and economic transformation in Europe from fourteenth to seventeenth centuries.

## HIST 507. The Reformation (B) (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 (B) (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 (C) (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 (C) (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 (C) (3)

Europe in the age of dictatorship, world war, decline, and recovery.
HIST 514. History of Science: From Revolution to Evolution (A) (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 (A) (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 (A) (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 post-war world in feature films.

## HIST 528. Social History of Early Modern Europe (B) (3)

Historical survey of European society emphasizing changes in the family, health, diet, standard of living, urbanism, crime, migration, and literacy, from 1350 to beginning of Industrial Revolution.

## HIST 532. Topics in Early American History (B) (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 include: Women and the Family; Race, Class and Labor; American Revolution; Religion and Politics; Immigrants' Experiences. See Class Schedule for topic. May be repeated with new content. Maximum credit six units.

## HIST 535. The Age of Roosevelt (C) (3)

The United States in Depression, War, and Cold War. (Formerly numbered History 535B.)

## HIST 536. The United States Since World War II (C) (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 (C) (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 postWorld War II America. Themes include race, gender, sexuality, foreign policy, terrorism, religion, and politics.

## HIST 538. American Religious History (A) (3)

Prerequisite: Upper division or graduate standing.
Religious ideas, leaders, movements, institutions, and ideologies throughout United States history. Religious change over time and connections between religion and colonialism, nationalism, politics, race, class, gender, sexuality, war, diversity, justice, and material culture.

## HIST 539. Topics in the History of the American West (C) (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 (C) (3) (Offered only at IVC)

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 (C) (3)
Development of American foreign relations from Colonial Period to the Spanish-American-Filipino War.

## HIST 544B. Modern American Foreign Relations (C) (3)

Development of American foreign relations since 1900.
HIST 545. Constitutional History of the United States (C) (3)
Development of American constitutional ideals and institutions from colonial period to the present. Examines historical context of significant legal issues and constitutional cases.

## HIST 548. Race and Ethnicity in United States History (A) (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 (B) (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 (C) (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 557. Dictatorships and Human Rights in Latin America (C) (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 (C) (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 (B) (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 (C) (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 (C) (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 (C) (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 (A) (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 (A) (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 (A) (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 (A) (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 (A) (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 (C) (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 (A) (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. (Formerly numbered History 470.)

## HIST 596. Selected Studies in History (A) (B) (C) (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 Undergraduate Studies

## OFFICE: Administration 201 <br> TELEPHONE: 619-594-2872 <br> E-MAIL: honors@sdsu.edu <br> 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 score for verbal and mathematics of 1200 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 3.0 or higher 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. 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

## (Minor Code: 49993) (SIMS Code: 888001)

The Honors Minor in Interdisciplinary Studies consists of 15 units of honors interdisciplinary seminars and honors sections of general education courses, of which three 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 (3 units). Honors College 113.
Upper Division for the Honors Minor (12 units). Honors College 313, 480, 495 and three units selected from Honors College 413 or honors sections of general education courses (Anthropology 402; Humanities 370; Psychology 340; Religious Studies 356, 363; 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 in Interdisciplinary Studies students are required to complete a credit-bearing study abroad experience.

To meet the study abroad requirement, minors must complete one of the following:

1. An SDSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Travel Program;
4. A CSU Study Abroad Program;
5. General Studies 450.

## 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 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 research, creative activity, leadership, community service, and study abroad.

## 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. See Class Schedule for specific content.

## HONOR 413. Interdisciplinary Perspectives on

 Social Problems (3) [GE]Prerequisite: Completion of General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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 450. Honors Study Abroad (3)

Prerequisite: Upper division standing
Life and culture in a selected international setting through an approved study abroad program sponsored by the Weber Honors College. Maximum credit six units.

## HONOR 480. Seminar in High Impact Activities (3)

Prerequisite: Credit or concurrent registration in Honors College 313.

High impact activities completed in research, leadership, service, and/or creative arts performance. Impact of engagement outside the classroom on specific goals.

## 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 In the College of Professional Studies and Fine Arts

## OFFICE: Professional Studies and Fine Arts 436 <br> TELEPHONE: 619-594-4964 / FAX: 619-594-4443 http://www.sdsu.edu/htm

## Faculty

Director: Winston
Sycuan Institute on Tribal Gaming Chair: Spilde
Professor: Testa
Associate Professors: Ponting, Spilde
Assistant Professor: Sipe
Lecturers: Blake, Campbell, Corr, Dathe, DeFino, Sayer
Director of The J. Willard and Alice S. Marriott Foundation Student Center for Professional Development: Blake

## Offered by the L. Robert Payne School of Hospitality and

 Tourism ManagementMaster of Science degree in hospitality and tourism 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.

## 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.

## 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 C or higher: Hospitality and Tourism Management 201, 223, 250; Accountancy 201; Economics 101 and 102; Management Information Systems 180; Mathematics 120 or 150; Rhetoric and Writing Studies 290, 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 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 (PSFA-436), 619-5944964, 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.

## Advising (Mandatory)

All students admitted to the university with a declared major in hospitality and tourism management are required to attend an advising meeting with the undergraduate advisers in the school every semester.

## 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 course must be a C.

## Emphasis in Hotel Operations and Management (SIMS Code: 663102)

Preparation for the Major. Hospitality and Tourism Management 201, 223, 250; Accountancy 201; Economics 101, 102; Management Information Systems 180; Mathematics 120 or 150; Rhetoric and Writing Studies 290, and Statistics 119 or Economics 201. (30-31 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$. The minimum grade in each class is C or higher.

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 47 upper division units to include Hospitality and Tourism Management 301, 320, 380, 398, 455, 480, 490, 491, 498; and three units of electives selected from Hospitality and Tourism Management, 425, 450, 453, 456, 465; 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, 223, 250; Accountancy 201; Economics 101, 102; Management Information Systems 180; Mathematics 120 or 150; Rhetoric and Writing Studies 290, and Statistics 119 or Economics 201. (30-31 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$. The minimum grade in each class is C or higher.

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, 431, 480, 490, 491, 498; and three units of electives selected from Hospitality and Tourism Management 333, 430, 433, 435; Business Administration 323, 350, 360, 370; Management 352; Recreation and Tourism Management 404, 470.

## Emphasis in Restaurant Operations and Management (SIMS Code: 663103)

Preparation for the Major. Hospitality and Tourism Management 201, 223, 250; Accountancy 201; Economics 101, 102; Management Information Systems 180; Mathematics 120 or 150; Rhetoric and Writing Studies 290, and Statistics 119 or Economics 201. (30-31 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$. The minimum grade in each class is C or higher.

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, 425, 444, 450, 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, 223, 250; Accountancy 201; Economics 101, 102; Management Information Systems 180; Mathematics 120 or 150; Rhetoric and Writing Studies 290, and Statistics 119 or Economics 201. (30-31 units)

These prerequisite courses may not be taken $\mathrm{Cr} / \mathrm{NC}$. The minimum grade in each class is C or higher.

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, 371, 372, 373, 380, 398, 480, 490, 498; Business Administration 323, 350, 360, 370; Management 352; Recreation and Tourism Management 404, 470.

## Courses (нтм)

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 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)

(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) Cr/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 425. Property Management in Hospitality and Tourism (3)
Prerequisite: Hospitality and Tourism Management 301.
Development, planning, and maintenance of hospitality facilities. Real estate economics, income generation, lease and management contracts, building operations, project development sequencing, conceptual and space planning, financing, asset management, industry practices, renovation, and public relations.

## HTM 430. Specialty Event Management (2) <br> 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)
Prerequisite: Hospitality and Tourism Management 301.
Planning, developing, and implementing hotel meeting and convention services.

## 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 444. Restaurant Multi-Unit Operations (3)

Prerequisite: Hospitality and Tourism Management 340.
Multi-unit management of restaurants, examining structure and principles for providing superior technical and expressive service on a sustainable basis.

## HTM 450. Venture and Entrepreneurial Management in

 Hospitality and Tourism (3)Prerequisites: Hospitality and Tourism Management 301, Business Administration 323, 350, 360, and 370.

Initiating, expanding, purchasing, and consolidating hospitality and tourism businesses; examination of entrepreneurial approach including concepts, theories, techniques, and practices of managerial innovation/implementation; analysis of entrepreneurial skills.

## 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 474. Tribal Gaming: Slot and Table Games Management (3)
Prerequisites: Hospitality and Tourism Management 201 and 371.
Games of chance played in a casino, mathematics and technology involved, and management techniques required to support operations.

## 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 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) Cr/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 <br> TELEPHONE: 619-594-5186 / FAX: 619-594-1004 <br> http://classicsandhumanities.sdsu.edu

## Faculty

Emeritus: Eisner, Genovese, Skwara
Chair: Levitt Kohn
Associate Professors: Rybakova, Smith
Lecturers: Caldwell, Kuhlken, Quntanilla

## 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

The humanities comprise all uniquely human accomplishments. Founded in history, they are the artistic and intellectual traditions of civilized peoples, namely: language, literature, philosophy, religion, and the arts. The goal of the humanities major is an interdisciplinary understanding of peoples and their times through accomplishments that convey best what they value most. In short, humanities shows us what being civilized amounts to, and by directing us to the meaning and worth of life, it helps us to create and enjoy a life of our own.

Majors in humanities may choose a general course of studies that allows for a balance between Western and non-Western civilization or they may emphasize European civilization, which takes its start with the Greeks. They all have at their disposal the Burnett Classics Seminar Room with its library and media resources. In addition to close academic advising and fellowship in a small department with diverse interests, they culminate their studies with a senior seminar.

With a background in critical analysis and with an appreciation of history, ideas, and the arts, a graduate in humanities might find opportunities in communication, diplomacy, or commerce, as a cultural consultant, an editor or writer, an arts critic, a travel consultant, or a museum curator. Some of these careers, as well as teaching or research, will require study beyond the bachelor's degree, but the broad, integrated humanities program is designed for success in many fields.

## 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 and the paper submitted for Humanities 490.

A minor is not required with this major.

## Global Humanities Program (SIMS Code: 113501)

Preparation for the Major. Humanities 101; History 100-101; and three units from Classics 140, Comparative Literature 270A, 270B, English 220, Humanities 140, Religious Studies 101, or Women's Studies 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. (14-25 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, 220, 221; and one three-unit upper division course taught in the language. (25 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 or 250L; and Classics 303L-304L. (14-16 units)
Persian 101, 102, 201, 202; and one four-unit upper division course taught in the language. (20 units)
Portuguese 101, 201, 301, 401. (16 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. Passing the Writing Placement Assessment with a score of 10 or English 508W 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. 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 490; 12 units selected from Classics 340, Humanities 350, 405, 406, 407, 408, 409; 15 units from Africana Studies, Art (art history), Asian Studies, Classics, Comparative Literature, History, Humanities, Latin American Studies, Music, Philosophy, Religious Studies, Theatre, or Women's Studies (at least nine units must be taken in non-European content, e.g., Asia, Africa, Latin America).

Elective Approval. Elective courses taken to fulfill the major must be approved by the humanities undergraduate adviser and the approval must be filed with the Office of Advising and Evaluations.

## Emphasis in European Humanities

## (SIMS Code: 113505)

Preparation for the Major. Humanities 101; History 105-106; 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. (14-25 units)
French 100A, 100B, 201, 210, 220, 221; and one three-unit upper division course taught in the language. (25 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 or 250L; and Classics 303L-304L. (14-16 units) Portuguese 101, 201, 301, 401. (16 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. Passing the Writing Placement Assessment with a score of 10 or English 508W 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. 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 33 upper division units to include Classics 340, Humanities 405, 406, 407, 408, 409, 490; three units from Geography 336, Political Science 301A, 301B, 302; nine 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 and the approval must be filed with the Office of Advising and Evaluations.

## 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 to six units must be selected from Humanities 350 and Asian 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 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 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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Literature and culture stemming from France. Literary, artistic, and intellectual achievements. Traditions and influences to include contributions of the Francophone world.
HUM 320. German Culture (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Literary, artistic, and intellectual achievements of Germany and the German-speaking world. Great cultural traditions and influences historically and in the present.
HUM 330. Russian Culture (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 340. Italian Culture (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Italy's literary, artistic, and intellectual achievements. Great cultural traditions and influences in history and today.

## HUM 350. African Cultures (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C, Humanities required for nonmajors.

Interdisciplinary survey of sub-Saharan African civilizations and cultures. Religion, literature, and the arts from ancient times to present. (Formerly numbered Humanities 460.)
HUM 370. American Culture (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 405. Faith and Hope (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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. (Formerly numbered Humanities 401.)

## HUM 406. Renaissance and Self (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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. (Formerly numbered Humanities 402.)

## HUM 407. Rationalists and Romantics (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Eighteenth century Enlightenment and its descendents. 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. (Formerly numbered Humanities 403.)

## HUM 408. The Modern (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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. (Formerly numbered Humanities 404.)

## HUM 409. The Future (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 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. (Formerly numbered History 404.)

## HUM 506. The Renaissance (3)

(Same course as History 506)
Intellectual, artistic, social, and economic transformation in Europe from fourteenth to seventeenth centuries.
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.

# 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 environment and society.
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, Latin American Studies, Lesbian, Gay, Bisexual, and Transgender Studies, Liberal Studies, Social Science, and Sustainability.

## Interdisciplinary Studies in Three Departments

## In the Division of Undergraduate Studies

Office: Administration 101
Telephone: 619-594-5842
FAX: 619-594-7934

## Advising

Preliminary approval of the major must be secured from the interdisciplinary studies in three departments (IS3D) adviser in the Division of Undergraduate Studies. 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://dus.sdsu.edu/dus/ interdisciplinarystudies.aspx.

## 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).

## The Major

Interdisciplinary Studies in Three Departments (IS3D) is a studentdesigned 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://dus.sdsu.edu/dus/ interdisciplinarystudies.aspx for additional information.

## Interdisciplinary Studies in Three Departments

## 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.

For students electing biology as one of the three departments for the Interdisciplinary Studies in Three Departments, the minimum requirement for the lower division preparation for the major is Biology 204, 204L, and either Biology 100 or 203 and 203L ( $7-8$ units). The minimum requirement for the upper division major is an organismal course as described for the biology major, either both Biology 352 and 354 or both Chemistry 365 and Biology 366L, and a 500-level biology course (minimum 10 units). Other biology courses numbered 350 and above may be included as electives.

For students electing French as one of their departments, all lower division preparation for the major or equivalent competency must be completed in addition to French 301, 305A or 305B, and 421 or 422. Students electing Italian must fulfill lower division competency requirements, Italian 301, and two other upper division Italian courses.

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 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.

## Urban Studies

## In the College of Arts and Letters

Office: Department of Geography, Storm Hall 314
Telephone: 619-594-5437

## 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.
Co-Chairs: Bosco (Geography) and Marcelli,P. (Geography)
Undergraduate Advisers: Bosco (Geography), Marcelli, P. (Geography)
Committee: Adams (Political Science), Bosco (Geography),
Marcelli, E. (Sociology), Marcelli, P. (Geography), Pérez
(Anthropology), Puttitanun (Economics)

## 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.

## 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).

## 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.

## 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; Geography 102; Political Science 101 or 102; Sociology 101; and Economics 201 or Political Science 201 or Sociology 201 or Statistics 250. (18 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 33 upper division units to include nine units from each of the following groups: (a) Urban Theory: Chicana and Chicano Studies 355 [or Latin American Studies 355]; Economics 458; Geography 354; Political Science 422; Public Administration 320; and (b) Urban Methods: Economics 301, Geography 380, 381, 385, 484, 584, 586, 589, Public Administration 420, Sociology 406, 407, 408; and 15 units in 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, 556, 558, Latin American Studies 320, 550, Sociology 355, 443, 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 (if not taken as a requirement), Economics 401, 458 (if not taken as a requirement), 489, 565 , Geography 353, 354 (if not taken as a requirement), 558, 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), $370,375,454,572,591$ and 591L, 592 and 592L, 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; Humanities 350; 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)

Dr. Alan R. Sweedler, Department of Physics, is adviser for 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

## Environment and Society Minor*

## (Minor Code: 22039) (SIMS Code: 112301)

Dr. David Carruthers (Department of Political Science) and Dr. Matthew Lauer (Department of Anthropology), are the advisers for this minor.

The minor in environment and society consists of 15 units to include three units from Environmental Science 100, Geography 101, 370, Biology 315; three units from Anthropology 353 [or Sustainability 353], History 441, Philosophy 332 [or Sustainability 332], Political Science 334 [or Sustainability 334]; and nine units selected from American Indian Studies 420, Anthropology 353 [or Sustainability 353]. Asian Studies 320, Biology 324, 327, Economics 455, 456, 458; Environmental Engineering 320; Geography 354, 409, 426, 573, Geological Sciences 303, 305, History 584, International Security and Conflict Resolution 310, Latin American Studies 540, Oceanography 320, Philosophy 332 [or Sustainability 332], Physics 499 (History of Science and Technology), Political Science 334 [or Sustainability 334], 564, Public Health 302, Recreation and Tourism Management 305, 485, Religious Studies 376, Sociology 350, Women's Studies 540, 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.

[^11]
## Honors Minor in Interdisciplinary Studies

## (Minor Code: 49993) (SIMS Code: 888001)

The Honors Minor in Interdisciplinary Studies consists of 15 units of honors interdisciplinary seminars and honors sections of general education courses, of which three 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 (3 units). Honors College 113.
Upper Division for the Honors Minor (12 units). Honors College 313, 480, 495 and three units selected from Honors College 413 or honors sections of general education courses (Anthropology 402; Humanities 370; Psychology 340; Religious Studies 356, 363; 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 in Interdisciplinary Studies students are required to complete a credit-bearing study abroad experience.

To meet the study abroad requirement, minors must complete one of the following:

1. An SDSU Study Abroad Program;
2. An SDSU Exchange Program;
3. An SDSU Study Travel Program;
4. A CSU Study Abroad Program;
5. General Studies 450.

## 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, 489, 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 College of Business Administration

## OFFICE: Arts and Letters 208 <br> TELEPHONE: 619-594-4505 / FAX: 619-594-7738 <br> E-MAIL: ib@mail.sdsu.edu http://www.sdsu.edu/ib <br> A member of AACSB International-The Association to Advance Collegiate Schools of Business.

## Faculty

International Business is administered by the International Business Program Committee. The program 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, Public Affairs, 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 College of Business Administration. 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 and North America/Spanish, 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 75 units but have less than a 2.9 cumulative GPA will be removed from the international business premajor and placed in undeclared.

## Semester Abroad Requirement

All International Business majors are required to complete a semester abroad. Students may satisfy the requirement by studying abroad through one of our approved exchange programs. Students must complete 12 units of coursework in the target language. At least two out of the four courses must be upper division business courses. Students must successfully complete all four courses with a passing grade otherwise the study abroad requirement will not have been met. Students must be upper division in the major at least one semester prior to going abroad. Exceptions may be made in Arabic, Chinese, Japanese, Korean, and Russian. Unapproved study abroad programs will not meet the requirement.

As an alternative to studying abroad at an approved exchange program, students may choose to complete an internship abroad in the region and language of emphasis. In order to meet this requirement, students must complete a minimum of 250 hours of work abroad with approval from the internship coordinator. International students emphasizing in our English/North America track meet this requirement by studying at SDSU.

## Study Abroad Programs

The international business program currently has exchange agreements with universities in the following countries: Argentina, Brazil, Canada, Chile, China, Costa Rica, Ecuador, France, Germany, Italy, Japan, Mexico, Peru, Portugal, Russia, Spain, and Taiwan. Please see the international business website for the names of the specific universities and study abroad eligibility criteria. Qualified international business majors participating in an exchange program make normal progress toward the degree while generally paying only SDSU tuition and fees. Students are required to attend a study abroad information session and apply to study abroad at least one year prior to their intended study abroad semester.

## Internship Requirement

All students in the major must complete an internship in international business by enrolling in the International Business 495 course and interning for a minimum of 150 hours. Students have to be upper division in the major prior to beginning their internship. Students may choose to complete an internship abroad, though this is not required. Students who choose to complete an internship abroad may also meet the Semester Abroad Requirement by completing 250 hours in their region and language of emphasis, but pre-approval must be obtained from the International Business office. Students are required to attend an orientation meeting prior to enrolling in International Business 495.

## 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 or higher: 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, 245; Linguistics 100 or Rhetoric and Writing Studies 100; Linguistics 200 or Rhetoric and Writing Studies 200 (12 units); French 100A, 100B, 201, 210, 220, 221 (22 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, 201 (10 units); Russian 100A, 100B, 200A, 200B (20 units); or Spanish 101, 102, 201, 202, 211, 212 (22 units);
c. Complete with a grade of C or higher, the regional/cultural studies emphasis from one of the following regions: Africa, Middle East, and North Africa: History 100 and 101; Asia: Asian Studies 100 101, or 150; Latin America: Latin American Studies 101; North America: Six units (one pair) selected from History 109, 110; or Political Science 101, 102; Central Europe: Six units selected from Classics 140; European Studies 101; History 105, 106 (recommended); Western Europe: Six units selected from Classics 140; European Studies 101; History 105, 106 (recommended) These courses cannot be taken for credit/no credit (Cr/NC);
d. Complete a minimum of 60 transferable semester units;
e. Have a cumulative GPA of 2.90 or higher.

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). After satisfying the above supplementary admissions criteria, students must submit documentation (unofficial transcripts, grade cards, etc.) to the program adviser before they can be admitted to the upper division major.

## Advising

All students admitted to the university with a declared major in International Business are required to attend an advising meeting with the program 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 |
|  | North America | 113648 |
|  | 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."

A minor is not required with this major but students are encouraged to pursue a minor offered through the College of Business Administration in one of the following areas: Accounting, Entrepreneurship, Finance, Information Systems, Management, Marketing, or Real Estate. Students may opt to pursue a minor in Economics through the College of Arts and Letters. International business majors may not double major in the College of Business Administration or in the language or regional/cultural emphases used to satisfy major requirements.

No courses in the preparation for the major may be taken for $\mathrm{Cr} / \mathrm{NC}$; 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: 34-50 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). Exceptions can be made for students enrolled in a dual degree program through international business. 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, 245; Linguistics 100 or Rhetoric and Writing Studies 100; Linguistics 200 or Rhetoric and Writing Studies 200. (12 units)
French 100A, 100B, 201, 210, 220, 221. (22 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, 201. (10 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):

Africa, Middle East, and North Africa: History 100 and 101.
Asia: Three units selected from Asian Studies 100, 101, or 150.
Latin America: Latin American Studies 101.
North America: Six units (one pair) selected from History 109,
110; or Political Science 101, 102.
Central Europe: Six units selected from Classics 140; European
Studies 101; History 105, 106 (recommended).
Western Europe: Six units selected from Classics 140; Europe-
an Studies 101; History 105, 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: 46-48 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 23 upper division units to include Business
Administration 300, 323, 350, 360, 370, 405; Finance 329;
Marketing 376. It is highly recommended that a minor be obtained through either the College of Business Administration in Accounting, Entrepreneurship, Finance, Information Systems,
Management, Marketing, or Real Estate, or in Economics through
the College of Arts and Letters.
II. Language Emphasis (choose one language):

Arabic 301, 302, and 350 or 496. (12 units)
Chinese 301, 302, 431, 434. (12 units)
English: Communication 371; Linguistics 305W or Rhetoric and Writing Studies 305W; Linguistics 496 or College of Arts and Letters 496 or International Business 596, with relevant content; Rhetoric and Writing Studies 503W. (12 units)
French 301, 302, 422, and 423. (12 units)
German 300, 301, and six units selected from German 400, 410, 411, 430 and 520. (12 units)
Italian: 12 units selected from Italian 301, 305A, 305B, 421, 422 or 424.
Japanese 311, 312, 321 or 322, 411. (12 units) (Not open to speakers of Japanese who have completed compulsory education through junior high school in Japan.)
Korean 301, 302, 331. (10 units)
Portuguese 301, 401, and 496 (six units approved by the department adviser). (12 units)
Russian 301, 303, 430, 501. (12 units)
Spanish 301, 302 (or 381 or 382 and either 350, 491 or 493), 307, 407 (12 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. In addition, all students must complete nine units, with no more than six units from one department, selected from the following groups of courses. Three units from the listed courses below, that are also listed in Section IV Explorations from General Education, can be used toward the major.

Asia/Chinese: Art 564; Asian Studies 300, 421 [or History 421]; Chinese 433; Comparative Literature 451 [or Asian Studies 451]; History 420, 566, 567; Philosophy 351; Political Science 362; Religious Studies 338, 340, 345.

Asia/Japanese: Art 565, 566; Asian Studies 300, 421 [or History 421], 458, 459; Comparative Literature 451 [or Asian Studies 451]; History 420, 570; Japanese 321, 322, 412, 421, 422, 480; Philosophy 353; Political Science 362, 575; Religious Studies 338, 341.

Asia/Korean: Korean 321 and six units selected from Asian Studies 300, 421 [or History 421], 458, 459; Comparative Literature 451 [or Asian Studies 451]; History 420; Philosophy 353; Political Science 362, 575; Religious Studies 338, 345.

Latin America/Portuguese: Anthropology 442; Economics 464; Geography 324; History 415 [or Latin American Studies 415], 416, 558; Latin American Studies 307, 366 [or Political Science 366], 420; Political Science 566, 567; Portuguese 307, 535.

Latin America/Spanish: Anthropology 440, 442, 540; Art 563; Comparative Literature 445; Economics 464; Geography 324; History 415 [or Latin American Studies 415], 416, 550, 551, 558; Latin American Studies 320, 340, 366 [or Political Science 366], 370; Political Science 566, 567, 568; Spanish 341, 342, 406A, 406B; Women's Studies 512.

Middle East and North Africa/Arabic: Arabic 330; Economics 466; History 436, 473, 474, 488, 501, 574; Political Science 363; Religious Studies 310, 328, 330.

North America/English, North America/French and North America/Spanish: Africana Studies 321, 341, 422, 471; American IndianStudies 320, 331 [orPolitical Science 331], 440; Anthropology 439; Asian Studies 310; Chicana and Chicano Studies 301, 306, 320, 350A, 350B; Economics 338, 565; Geography 321; History 410, 422 [or Asian Studies 422], 548 [or Chicana and Chicano Studies 548]; Humanities 370; Political Science 305, 336, 347A, 347B, 430 [or Latin American Studies 430], 435, 436, 478, 533; Religious Studies 390A-390B; Sociology 421, 522, 554; Women's Studies 341A, 341B.

Central Europe/Russian: Geography 336; History 408; Humanities 330; Political Science 359; Russian 305A, 310, 435.

Western Europe/French: Art 557; European Studies 301, 424, 501; French 305A, 305B, 421, 422, 424; Geography 336; History 407, 408; Humanities 310, 408; Political Science 356.

Western Europe/German: Art 557; European Studies 301, 424, 501; Geography 336; German 320, 400, 410, 430, 520; History 407, 408, 512B; Humanities 320, 408; Political Science 356.

Western Europe/Italian: Art 557; European Studies 301, 424, 501; Geography 336; History 407, 408; Humanities 340, 408; Italian 305A, 305B, 421, 422, 424; Political Science 356.

Western Europe/Portuguese: Art 557; European Studies 301, 424, 501; Geography 336; History 407, 408; Humanities 408; Political Science 356; Portuguese 443.

Western Europe/Spanish: Art 557; European Studies 301, 424, 501; Geography 336; History 407, 408; Humanities 408; Political Science 356; Spanish 340, 405A, 405B, 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 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 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 conferences required. Maximum credit six units with consent of instructor.
I B 498. Doing Business Internationally (1) Cr/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

## OFFICE: Storm Hall 223B

TELEPHONE: 619-594-3768 / FAX: 619-594-7302

## E-MAIL: iscor@mail.sdsu.edu

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

ISCOR Program Director and Undergraduate Advisers:
Graubart (Political Science), Greb (International Security and Conflict Resolution)
ISCOR Curriculum Committee: Ghosh (Women's Studies), Graubart (Political Science), Greb (ISCOR), Sinclair (Weber Honors College), Spitzberg (Communication), Varadarajan (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 Hansen Chair in Peace Studies

International Security and Conflict Resolution plays a central role in the administration of the Hansen Chair in Peace Studies, an endowed chair responsible for organizing and coordinating activities that focus more broadly on global justice, peace, and world affairs. Appointees to the chair also serve as a member of the Advisory Board of the Fred J. Hansen Institute for World Peace.

## 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], 478, 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 (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, 489; 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, 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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B. Social and Behavioral Sciences.

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]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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.

# Italian 

# 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: italian.coord@sdsu.edu
http://italian.sdsu.edu/

## Faculty

Chair: Donadey
Associate Professor: Clò
Lecturers: Ruggeri, Sylvers
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 Italian-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 <br> 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 equivalent 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 satisty 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 and completion of the General Education requirement in Foundations of Learning II. C. Humanities

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 and completion of the General Education requirement in Foundations of Learning II. C., Humanities.

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 and completion of the General Education requirement in Foundations of Learning II. C., Humanities.

Continuation of Italian 305A from the Renaissance to the present.

## ITAL 421. Italian Civilization (3) [GE]

Prerequisites: Eleven units of 200-level Italian and completion of the General Education requirement in Foundations of Learning II. C., Humanities.

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 424. Italian Cinema (3) [GE]

Two lectures and two hours of activity.
Prerequisites: Italian 212 and completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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]

Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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 <br> (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

OFFICE: Storm Hall West 214<br>TELEPHONE: 619-594-5268 / FAX: 619-594-4877<br>http://www-rohan.sdsu.edu/dept/linguist/index.html<br>Faculty<br>Chair: Osman<br>Professor: Higurashi<br>Associate Professor: Kitajima<br>Assistant Professor: Hansen<br>Lecturer: Kuratani<br>\section*{Offered by the Department of}<br>Linguistics and Asian/Middle Eastern Languages<br>Major in Japanese<br>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 fulfil 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, or those who pass level one of the Japanese Language Proficiency Test, created and edited by The Association of International Education and the Japan Foundation, or students whose placement test results demonstrate educated native or near-native fluency 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

## (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 <br> 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. (Formerly numbered Japanese 101.)

## 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.
(Formerly numbered Japanese 102 and 202.)
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. (Formerly numbered Japanese 201 and 303.)
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.
Prerequisites: Japanese 212 and completion of the General Education requirement in Foundations of Learning II.C., Humanities. General Education prerequisite not required for Japanese majors.

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.
Prerequisites: Japanese 311 and completion of the General Education requirement in Foundations of Learning II.C., Humanities. General Education prerequisite not required for Japanese majors.

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)

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)

Prerequisite: Japanese 311.
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]

Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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 411. Fourth Year Japanese I (3)

Prerequisite: Japanese 312.
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.
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) <br> Prerequisite: Japanese 312.

Japanese literature from earliest times to present. Major works of modern Japanese fiction as a literary genre and their cinematic interpresentation.

## JAPAN 422. Newspaper Reading and Advanced Composition (3)

Prerequisite: Japanese 411.
Development of reading and writing skills through texts taken from current Japanese newspapers and broadcast news.

## JAPAN 480. Business Japanese (3) <br> Prerequisite: Japanese 411.

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.


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## Jewish Studies

## In the College of Arts and Letters

## OFFICE: Arts and Letters 662A

TELEPHONE: 619-594-5327 / FAX: 619-594-8696
EMAIL: jewishstudiesprogram@mail.sdsu.edu
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 Kohn (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 on 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, 200, 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 30 upper division units.

## Culture and Society Area (9 units)

Comparative Literature 405 [or English 405]. The Bible as Literature (3)
English 526. Topics in Literature of the United States: Jewish American Literature (3)
History 436. Modern Jewish History in Feature Films (3)
History 527. The Holocaust in Feature Films (3)
Russian 435. Russian and East European Jewish Culture (3)

## History Area (9 units)

History 440. The Holocaust and Western Civilization (3)
History 474. The Middle East Since 1500 (3)
History 488. Modern Jewish History (3)
History 574. Arab-Israeli Relations, Past and Present (3)

## Religion and Thought Area (9 units)

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 581. Major Theme: Jewish and Christian Origins (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 Kohn, 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 Social Science with an emphasis 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 19-20 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, 200, or 201; and 12 upper division units selected from Jewish Studies 495, 496; Comparative Literature 405 [or English 405]; 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 (ss)

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) <br> 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 

## In the College of Professional Studies and Fine Arts

## OFFICE: Professional Studies and Fine Arts 361 <br> TELEPHONE: 619-594-5450 / FAX: 619-594-6246 <br> E-MAIL: jms@mail.sdsu.edu <br> 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).

## Faculty

Emeritus: Borden, Broom, Brown, Buckalew, Dozier, Hartung, Martin, Odendahl, Spevak
Director: Sha (Interim)
The Lionel Van Deerlin Professor of Communication and Public Policy: Eger
Professors: Davis, Eadie, Mueller, Sha, Wulfemeyer
Associate Professors: Arceneaux, Schmitz Weiss, Shen, Sweetser, Zhong
Assistant Professor: Nee
Lecturers: Barker, Cicalo, Coddon, DiProfio, Goret, Lockwood, Lopez, McBride, Pecsi-Guerrero, Vargas-Viglotti, Weiner

## 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 social justice, 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 journalism and media studies 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 or higher: 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 higher.

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 $C$ or higher 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 445, 470, 490, 495, 529; and six units of upper division coursework in journalism and media studies.

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.

## 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 or higher: 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 higher.

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 $C$ or higher 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.

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.

## Emphasis in Media Studies <br> (Major Code: 15060) (SIMS Code: 661110)

Students in the media studies emphasis learn established and emerging theories of mass communication effects; structure and concentration of media ownership; tools required to become a sophisticated and critical consumer of media content; processes and effects of mediated communication across nations and cultures; convergence of traditional media organizations/industries into hybrid structures; and emerging media industries and job opportunities.

The media studies emphasis is ideally suited for entrepreneurial individuals comfortable with the ambiguity of rapidly changing technologies, industries, and career paths. Graduates of the media studies emphasis will likely pursue several distinct career paths in the course of their professional lives, sometimes "inventing" new jobs for themselves as technologies and industries change.

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).

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 or higher: Journalism and Media Studies 200, 210; Economics 101; and three units selected from Accountancy 201, Art 101, Economics 102, Psychology 101, Public Health 101, Sociology 101. These courses cannot be taken for Credit/ No Credit (Cr/NC);
b. 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.);
c. Have a cumulative grade point average of 3.0 or higher.

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; Economics 101; and three units selected from Accountancy 201, Art 101, Economics 102, Psychology 101, Public Health 101, Sociology 101. (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 or higher 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 408, 412, 450, 489, 492, 494; 15 units selected from media studies topics courses: Journalism and Media Studies courses numbered 300-599, Learning Design and Technology 540, 541; Television, Film and New Media 430.

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.

## 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-forprofit 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 or higher: 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 higher.

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 $C$ or higher 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 journalism and media studies.

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.

## 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, 375, 408, 440, 460, 462, 480, 489. 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 in the College of Extended Studies, 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 Dr. Bey-Ling Sha, bsha@mail.sdsu.edu.

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 375, 450, 475, 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 (ums)

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] <br> Two lectures and one hour of discussion.

Social networking, virtual worlds, and digital media literacy. Creating and communicating arguments and consuming information via digital, social, and mobile technologies in a global environment.

## JMS 220. Writing for the Mass Media (3) <br> Two lectures and two hours of activity.

Prerequisites: Sophomore standing; ability to type; premajor in journalism, advertising, public relations. 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)

Prerequisite: Upper division standing.
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 C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition 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 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 375. Media Technology in the Global Environment (3)
Prerequisites: Upper division standing and Journalism and Media Studies 210 with grade of C (2.0) or better.

Technology's crucial role in shaping the knowledge economy and communication policies affecting life and work in the global age. Digital communication, media convergence, media regulation, and economic development.

## JMS 408. Principles of Media Studies (3)

Prerequisite: Upper division standing.
Media theories, models, and research exploring media effects, and audience uses of media.

## JMS 409. Women and Media (3)

Prerequisites: Upper division standing. Admission to a major in the School of Journalism and Media Studies. Proof of completion of prerequisites required: Copy of transcript.

Role of women in media, including messages about women and employment status of women.

## 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)

Prerequisites: Journalism and Media Studies 408 with grade of C (2.0) or better. An approved upper division writing course with grade of C (2.0) or better, or passing the Writing Placement Assessment with a score of 10. Admission to media studies emphasis, Major Code: 15060. Proof of completion of prerequisites required: Copy of transcript.

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 420. Public Affairs News Reporting (3)

One lecture and four hours of activity.
Prerequisites: Journalism and Media Studies 300, 310W, and 315 with grades of C (2.0) or better in each course. Admission to journalism major. Proof of completion of prerequisite 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 425. Writing Opinion, Reviews, and Criticism (3)

Prerequisites: Journalism and Media Studies 300, 310W with grades 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 430. Digital Journalism (3)

Prerequisites: Journalism and Media Studies 300, 310W, and 315 with grades 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 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)

One lecture and four hours of activity.
Prerequisites: Journalism and Media Studies 300, 310W with grades 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 grades 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. Using Media to Understand Cultures (3)

Prerequisites: Journalism and Media Studies 408, 489 with grades of C (2.0) or better in each course. Admission to media studies emphasis, Major Code: 15060. Proof of completion of prerequisites required: Copy of transcript.

Cultural phenomena through media products to include films, television programs, print media. Appreciation of various cultures and practices through analysis of media products.

## JMS 460. Principles of Advertising (3)

Prerequisite: Upper division standing.
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 470. Multimedia and Mobile Reporting (3)

One lecture and four hours of activity.
Prerequisites: Journalism and Media Studies 430 with a grade of C (2.0) or better. Admission to journalism major. Proof of completion of prerequisites required: Copy of transcript.

Principles and techniques of writing news for print, online, radio-television, and emerging media platforms. Field and laboratory experience.

## JMS 475. Mediated Communication in Intercultural Contexts (3)

Prerequisite: Admission to a major in the School of Journalism and Media Studies.

Role of culture in professional fields such as advertising, journalism, media studies, and public relations. Cultural values and practices as applied to various mediated communication products and contexts.

## JMS 480. Principles of Public Relations (3)

Prerequisite: Upper division standing.
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 grades 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 489. Research Methods in Mediated Communication (3)
Prerequisites: Upper division standing and Journalism and Media Studies 200 with 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 412, 420, 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)

Prerequisite: Journalism and Media Studies 412 with grade of C (2.0) or better. Proof of completion of prerequisite 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 grade of C or better required for majors.

## JMS 494. Media Law and Ethics (3)

Prerequisites: Upper division standing and Journalism and Media Studies 200 with 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 prerequisites required: Copy of transcript.

Theoretical and philosophical analysis of advertising in modern society.
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 529. Data-Driven Investigative Journalism (3)
One lecture and four hours of activity.
Prerequisite: Journalism and Media Studies 420 with a grade of $C$ (2.0) or better. Proof of completion of prerequisite required: Copy of transcript.

History and role of investigative journalism in the U.S. Use of the Internet, public records, spreadsheets, and databases to develop stories in the public interest. Finding patterns and leads in electronic data. Field and laboratory experience.

## JMS 547. Advanced Topics in Media Studies (3)

Prerequisites: Journalism and Media Studies 408 with a grade of C (2.0) or better. Admission to media studies emphasis, Major Code: 15060.

Reading, investigation, and research in a specialized topic in media studies. 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 with grades 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. Teams prepare multimedia news content. Field and laboratory experience. Completion of course with grade of $C$ or better is required for majors and minors.

## JMS 560. Advertising Research (3)

Prerequisites: Journalism and Media Studies 310W, 460, 462 with grades 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 grades 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. (Formerly numbered Journalism and Media Studies 461.)

## JMS 565. Advertising Campaigns (3)

Prerequisites: Journalism and Media Studies 560, 562 with grades 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 grade of C 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 and 480 with grades 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 585. Professional Practices in Public Relations (3)

Prerequisites: Journalism and Media Studies 481 and 581 with grades 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 grade of C or better is required for majors and minors.

## JMS 587. Advanced Topics in Public Relations (3)

Prerequisites: Journalism and Media Studies 480 with a grade of C (2.0) or better. Admission to public relations emphasis, Major Code: 05992.

Reading, investigation, and research in a specialized topic in public relations. May be repeated with new content. Maximum credit six units.
JMS 590. Seminar in Crisis Communication in PR Management (3)
Prerequisite: Upper division standing 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: Admission to a major in the School of Journalism and Media Studies. Proof of completion of prerequisite required: Copy of transcript.

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 595. Seminar in Theoretical Approaches to Public Relations (3)

Prerequisite: Journalism and Media Studies 585 with 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

OFFICE: Storm Hall West 214
TELEPHONE: 619-594-5268 / FAX: 619-594-4877
http://www-rohan.sdsu.edu/dept/linguist/index.html

## Faculty

Chair: Osman

## 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 12-13 units to include Korean 321; six to seven units selected from Korean 301, 302, 331; and three units selected from Korean 430, Political Science 362, or Religious Studies 345

Students must obtain a grade of C 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 schoo 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 equiv alent 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, usefu expressions, basic communication strategies, relationship between anguage 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 highernumbered 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 cultura 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 highernumbered 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]

Prerequisites: Korean 202; and completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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]

Prerequisites: Korean 301; and completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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]

Prerequisites: Upper division standing; and completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Development of art, religion, philosophy, political, social institutions through different periods in Korean history. Humanistic dimensions o the Korean mind, traditions, heritage. Taught in English.

## KOR 331. Business Korean I (4)

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)

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 495. Korean Internship (1-3) Cr/NC

Two to six hours of activity
Prerequisites: Korean 202. Upper division standing and consent of instructor.

Practical work experience in a field related to Korean studies under direction of activity sponsor and instructor.

## 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.

## Latin American Studies

## In the College of Arts and Letters

## OFFICE: Arts and Letters 377 <br> TELEPHONE: 619-594-1104 <br> 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 College of Business Administration
Chair: Ramona L. Pérez (Anthropology)
Undergraduate Adviser: David Carruthers (Political Science)
Graduate Adviser: Anthony R. Jerry (Latin American Studies)
Committee: Amuedo-Dorantes (Economics), Ball (Anthropology),
Baer (Political Science), Ben (History), Blanco (Portuguese),
Bosco (Geography), Carruthers (Political Science), Colston
(History), Conway (Anthropology), Deffebach (Art and Design), De Vos (History), Esbenshade (Sociology), Ewald, (Spanish), Farley (Geography), Ganster (Institute for Regional Studies of the Californias), Godoy Marquet (Spanish), González-Rivera (Chicana and Chicano Studies), Graubart (Political Science), Herzog (Public Affairs), Ibarra (Chicana and Chicano Studies), Iglesias Prieto (Chicana and Chicano Studies), Jerry (Latin American Studies), Lara (Women's Studies), Lauer (Anthropology), LymanHager (French), Maher (Political Science), Marcelli (Sociology), Martín-Flores (Spanish), Mattingly (Women's Studies), Mayes (Anthropology), Mclllwain (Public Affairs), Nericcio (English and Comparative Literature), O'Brien (Political Science), Ojeda (Sociology and Chicana and Chicano Studies), Ortiz (Chicana and Chicano Studies), Passananti (History), Pérez (Anthropology), Schmitz Weiss (Journalism and Media Studies), Sobo
(Anthropology), Swanson (Geography), Talavera (Public Health)

## 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; 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 three college semesters of Portuguese. 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, 415 [or History 415]. 498; Anthropology 440, 442; Economics 464; Geography 324; History 416, 580*; Political Science 366, 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 340, 350, 366 [or Political Science 366], 370, 415 [or History 415], 420, 430 [or Political Science 430], 498, 580; Chicana and Chicano Studies 340A, 350A, 375; Economics 365, 464, 565; Health and Human Services 350; History 416, 550, 551, 558, 580*; Political Science 361, 482, 566, 567, 568; Public Health 362.

Group B: Cultures and Environments. Latin American Studies 320, 355 [or Chicana and Chicano Studies 355], 540, 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 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; Art 561, 563; Chicana and Chicano Studies 376; Comparative Literature 445, 580*; English 519*; Portuguese 443; Spanish 341, 342, 406A, 406B, 502, 515.

* Acceptable when of relevant content with consent of adviser.


## Latin American Studies Major

## (Imperial Valley Campus only)

## With the B.A. Degree in Liberal Arts and Sciences

## (Major Code: 03081) (SIMS Code: 114302)

The major in Latin American studies is designed to provide (1) a foundation of understanding of the history, culture and governments of the countries of Latin America and the multiple interrelationships among those countries; and (2) a basic education and training for a business or professional career involving understanding of Latin America.

A minor is not required with this major.
Preparation for the Major. The lower division preparation for the major can be fulfilled by taking the following courses at a community college: elementary Spanish; intermediate Spanish or bilingual Spanish; intermediate conversational Spanish or bilingual oral Spanish; advanced conversational Spanish; and 12 units selected from cultural anthropology, cultural geography, history of the Americas, introduction to political science, comparative politics, and civilization of Spanish America and Brazil.

A minimum grade point average of 2.0 is required for all work attempted.

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 36 upper division units selected from the courses listed below with not less than 12 units in one field and nine in two other fields. At least 33 units must be in courses having Latin American content: Anthropology 442; Art 496 (when relevant); Chicana and Chicano Studies 335 [or English 335], 350A, 376; Economics 365, 464, 496 (when relevant); Geography 324, 496 (when relevant); History 415, 416, 496 (when relevant), 550, 551, 558; Political Science 566, 567, 568; Sociology 350, 450; Spanish 406A-406B, 515; Women's Studies 310 (when relevant).

## 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, Mixtec, or Zapotec. 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 340, 350, 366 [or Political Science 366], 370, 415 [or History 415], 420, 430 [or Political Science 430], 498, 580; Chicana and Chicano Studies 340A, 350A, 375; Economics 365, 464, 565; Health and Human Services 350; History 416, 550, 551, 558, 580*; Political Science 361, 482, 566, 567, 568; Public Health 362.

Group B: Cultures and Environments. Latin American Studies 320, 355 [or Chicana and Chicano Studies 355], 540, 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 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; Art 561, 563; Chicana and Chicano Studies 376; Comparative Literature 445, 580*; English 519*; Portuguese 443; Spanish 341, 342, 406A, 406B, 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 when of relevant content 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.

## UPPER DIVISION COURSES <br> (Intended for Undergraduates)

LATAM 307. Brazilian Music and Culture (3) [GE]
(Same course as Portuguese 307)
Prerequisites: Upper division standing; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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]

(Same course as Chicana and Chicano Studies 310)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

Mexican dance, art, music, cuisine, politics, tourism industry, education, and other facets of daily life through visits to selected venues.

## LATAM 340. Globalization and the Mexican Economy (3)

Prerequisite: One course selected from Latin American Studies 101, Anthropology 102, Economics 101, Geography 102, Political Science 103.

Mexico's industrial models in comparative perspective, including tensions between regionalization and globalization, range of industrial models and production models, industry case studies, and institutional development at regional level.

## LATAM 350. Globalization and the Americas (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II. B., Social and Behavioral Sciences.

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](Same course as Chicana and Chicano Studies 355)
Prerequisites: Upper division standing; and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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: Latin American Studies 101 or completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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]

(Same course as Chicana and Chicano Studies 380)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. 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]

(Same course as Chicana and Chicano Studies 400)
Prerequisite: Upper division standing and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Indigenous and colonial history of Latin America, pre-contact through early national period.
LATAM 420. Latin America Through Film (3) [GE]
Prerequisite: Latin American Studies 101 or completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Exploration of diverse cultures and history of Latin America through feature film by Latin American cinematographers. Political, social, and historic phenomena.

## LATAM 430. Immigration and Border Politics (3) [GE]

(Same course as Political Science 430)
Prerequisites: Completion of the American Institutions requirement and the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
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 and completion of the General Education requirement in Foundations of Learning II.C. Humanities required for nonmajors. 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) Cr/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 540. History, Society, and Ecology of Baja Peninsula (3)
Prerequisites: Latin American Studies 101; Geography 102; Anthropology 102 or Political Science 103.

Historical and social anthropology of Baja Peninsula, current issues in socio-economy of a small region, relations between human activity and natural environment, flora and fauna of region, and challenges to ecological preservation.

## 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 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.

GRADUATE COURSES
Refer to the Graduate Bulletin.

# Learning Design and Technology 

In the College of Professional Studies and Fine Arts

OFFICE: Professional Studies and Fine Arts 361
TELEPHONE: 619-594-6718 / FAX: 619-594-6376
http://go.sdsu.edu/education/edtec/index.aspx

## Faculty

Emeritus: Allen, Anthony, Harrison, Hoffman, Mathison, McAllister, Ritchie, Rossett, Saba
Area Coordinator: Bober-Michel
Professors: Bober-Michel, Dodge, Wang

## Offered by the School of Journalism and Media Studies

Master of Arts degree in education
Concentration in learning design and technology.
Specialization in educational computing
Specialization in workforce education and lifelong learning
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 $532,561,570,572$, 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 15 units of coursework to include Learning Design and Technology 540, 544, and nine units selected from Learning Design and Technology $561,570,572$, or 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. 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 <br> (Intended for Undergraduates)

## LDT 470. Technologies for Teaching (1-3)

One unit: One-half hour of lecture and one hour of activity. Two units: One hour of lecture and two hours of activity. Three units: One and one-half hours of lecture and three hours of activity.

Application of computer and video technologies to practice of teaching. Meets computer literacy requirement for Level I teaching credential. (Formerly numbered Educational Technology 470.)

## 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 532. Producing Digital Learning Media (1-3)

Two hours of activity per unit.
Digital learning media production for professionals in health, law, science, business, publishing, and other settings. Use of web- and video-based technologies, presentation, and data analysis tools for training and education. Not open to students in learning design and technology master's concentration or certificate programs. (Formerly numbered Educational Technology 532.)

## 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 541. Educational Web Development (3) <br> One lecture and six hours of laboratory. <br> Prerequisite: Basic computer literacy. <br> Systems, graphic design, and usability principles applied to design and development of web-based educational multimedia Planning and prototyping digital media. (Formerly numbered

 Educational Technology 541.)
## 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 570. Advanced Teaching with Technologies (3)

Prerequisite: Learning Design and Technology 470 or equivalent work experience.

Design of project-based and problem-based learning using Internet resources. Constructivist learning with online databases. Collaboration with distant classrooms and experts. (Formerly numbered Educational Technology 570.)

## LDT 572. Managing the Technology-Rich Classroom (3)

One lecture and six hours of laboratory.
Prerequisite: Learning Design and Technology 540.
Use of technology to support planning, presenting, and managing instructor-led courses. Strategies for integrating audience response systems, collaborative tools, and social software into courses. (Formerly numbered Educational Technology 572.)

## 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 

## Offered by the College of Arts and Letters

## OFFICE: Arts and Letters 317 <br> TELEPHONE: 619-594-6662

## 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: Ben (History), Benkov (European Studies), Bigham (Linguistics and Asian/Middle Eastern Languages), Borgstrom (English), Cayleff (Women's Studies), Corliss (Public Health), Eadie (Journalism and Media Studies), Elliott (Sociology), Ghosh (Women's Studies), Giordano (Women's Studies), GonzálezRivera (Chicana and Chicano Studies), Godoy (Spanish), Howard (English and Comparative Literature), Kim (Sociology), Kuefler (History), Mohammed (Religious Studies), Moore (Religious Studies), Penrose (History), Schreiber (Political Science),
Sterling Aquino (Teacher Education), Vaughn (Psychology)

## Offered by Lesbian, Gay, Bisexual, and

## Transgender Studies

Major in lesbian, gay, bisexual, and transgender studies with the
B.A. degree in liberal arts and sciences.

Minor in lesbian, gay, bisexual, and transgender studies.
Certificate in lesbian, gay, bisexual, and transgender studies (refer to the Graduate Bulletin).

## The Major

The interdisciplinary major in lesbian, gay, bisexual, and transgender (LGBT) 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 LGBT subcultures and identities from a global perspective. From there, courses address scientific and psychological explanations of LGBT identities, LGBT literature, the institutions of law and government, education and the workplace, family, and healthcare. We will finish by looking at local and international LGBT 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 LGBT 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, and transgender studies prepares students for a large variety of careers. Students majoring in lesbian, gay, bisexual, and transgender studies can work in LGBT non-profit agencies, law, local and national politics, health care settings, counseling centers, journalism, news media, theatre, film, fine arts, and education. LGBT studies majors may go on to obtain graduate degrees, preparing for a career as an LGBT studies scholar. LGBT 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, and transgender studies are urged to meet with the undergraduate adviser either prior to or during their first semester.

## Impacted Program

The lesbian, gay, bisexual, and transgender studies major is an impacted program. To be admitted to the lesbian, gay, bisexual, and transgender 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, and Transgender Studies Major

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 22990) (SIMS Code: 119506)

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, and transgender studies must complete a minor in another field to be approved by the program director or major adviser of lesbian, gay, bisexual, and transgender 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 $(\mathrm{W})$ 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; 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.

[^12]
## Lesbian, Gay, Bisexual, and Transgender Studies Minor

(Minor Code: 49991) (SIMS Code: 119505)
Dr. Esther D. Rothblum, Department of Women's Studies, is adviser for this minor.

The interdisciplinary minor in lesbian, gay, bisexual, and transgender studies consists of a minimum of 15 units to include Lesbian, Gay, Bisexual, and Transgender Studies 321, 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 COURSE

## 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. Lesbian and Gay Identities in the Modern World (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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 transgendered community. (Formerly numbered General Studies 321.)

## LGBT 322. Lesbian and Gay History and Culture (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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 transgendered community. (Formerly numbered General Studies 322.)

## 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 COURSE <br> (Also Acceptable for Advanced Degrees)

## LGBT 598. Lesbian, Gay, Bisexual, and Transgender Studies Internship (3) Cr/NC

Prerequisite: Lesbian, Gay, Bisexual, and Transgender 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 Division of Undergraduate Studies

## OFFICE: Liberal Studies Office (Administration 101) TELEPHONE: 619-594-5842 or 619-594-0597 http://libst.sdsu.edu

## Faculty

Faculty assigned to teach liberal studies courses are drawn from the colleges at San Diego State University. The program is housed in the Division of Undergraduate Studies.
Emeritus: P. Roeder
Director: Sharon F. Bendall (Division of Undergraduate Studies)

## Offered by the Division

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.

## 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, physica 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 30 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 the liberal studies writing, research, and CSET-style assessments; the official CSET; and the application process for their credential program. They are strongly encouraged to save both syllabi and written work (examinations, projects, and other materials) from all their courses in preparation for the CSET and the senior-level assessment. These interdisciplinary courses plus the core subject matter courses provide a strong foundation for students' future careers

Students combine the above core coursework with a focus and, in some cases, an additional option in order to pursue specific interests and career goals as follows:

## Emphasis in Education-Generalist

Preparation for teaching in elementary school
Open only to transfer students who have completed the Transfer Model Curriculum.

Focus in Literacy, Mathematics, or Science; no option

## Emphasis in Elementary Education

Preparation for teaching regular education, special education, or bilingual education in elementary school or English in middle school.

Focus in Literacy, Mathematics, or Science plus options in English as a second language, special education, bilingual education, or performing arts.

## Emphasis in Mathematics

Preparation for teaching regular education in elementary school and/or mathematics in middle school.

Focus in Mathematics plus option in Mathematics.

## Emphasis in Science

Preparation for teaching regular education in elementary school and/or science in middle school.

Focus in Science plus option in Science
Emphasis in Education-Generalist. This emphasis is available only for transfer students who complete the California Community College Associate in Arts in Elementary Teacher Education (AA-T) degree and complete the Transfer Model Curriculum (TMC) for Libera 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 C 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 iterature, 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 C 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 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 C 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 certifi cation. 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 C 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 seniorlevel assessments. See the website for current information, advising procedures, and email questions. Information about SDSU credential programs and financial aid opportunities is available at the College of Education, Office of Student Services, EBA-259, 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, 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 higher;
c. Complete all courses listed in Preparation for the Major sections for the liberal studies major;
d. Complete with a grade of C or higher: a certified Area Al Oral Communication course; a certified Area A3 Intermediate Composition and Critical Thinking course; Exercise and Nutritional Sciences 241A and 241B; and Mathematics 210 and 211. These courses cannot be taken for Credit/No Credit (Cr/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: 49015)

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, preapproved 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 adviser.

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;
5. One of the following courses:

- Asian Studies 490;
- General Studies 450;
- Health and Human Services 350;
- Honor 450;
- International Security and Conflict Resolution 450;
- Latin American Studies 450;
- Liberal Studies 350 or 351;
- Political Science 450.


## Lower Division Core (46-50 units)

Students in the Elementary Education, Mathematics, and Science 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 (Cr/NC) grades in this section.

1. Oral Communication (3 units). A grade of $C$ or higher is required.
2. Composition (3 units).
3. Intermediate Composition and Critical Thinking (3 units). A grade of $C$ or higher is required.
II. Foundations of Learning: 28 minimum units.
A. Natural Sciences and Quantitative Reasoning (10 units)
4. Biology 100 (3 units).
5. Geology 104 (3 units).
6. Biology 100L (1 unit).
7. Mathematics 210 (3 units). Complete with a grade of $C$ or higher [cannot be taken for credit/no credit (Cr/NC)].
B. Social and Behavioral Sciences (6 minimum units)
8. Geography 106 (3 units).
9. Three to six units selected from Child and Family Development 170 (3 units); or Teacher Education 170 (3 units); or Psychology 101 and Psychology 230 (6 units). ${ }^{2}$
C. Humanities (12-13 units)
10. Literature: Three units selected from Comparative Literature 270A, 270B; English 220.
11. Visual and Performing Arts: Three units selected from Art 157, 259; Theatre 120.
12. History: History 100 (3 units).
13. Philosophy, Religious Studies, or Foreign Language ${ }^{3}$. (3-4 units)
1 See the General Education requirements in Communication and Critical Thinking.
2 Upper division transfer students may substitute a transfer course equivalent to SDSU course Child and Family Development 270 in lieu of Teacher Education 170.
${ }^{3}$ See the General Education requirement in Foundations of Learning IIC. Three to four units selected from 4. Philosophy or Religious Studies or 5 . Foreign Language.
III. American Institutions: 6 units.
14. Three units selected from Africana Studies 170A, American Indian Studies 140, Chicana and Chicano Studies 141A, History 109
15. Three units selected from Africana Studies 170B, American Indian Studies 141, Chicana and Chicano Studies 141B, History 110, Political Science 102.
IV. Liberal Studies: 3 units.

Education 200 (3 units).

## Emphasis in Education-Generalist (SIMS Code: 886459)

## 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 ( 9.5 units): Exercise and Nutritional Sciences 241A, 241B (complete with a grade of C or higher); Mathematics 211 (complete with a grade of C or higher); Mathematics Education 212; Music 102. Exercise and Nutritional Sciences 241A, 241B and Mathematics 211 may not be taken for Credit/No Credit (Cr/NC). (9.5 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 or better in Rhetoric and Writing Studies 280 or 281 before taking English 306W and earn a grade of C (2.0) or higher. 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. (40.5-50 units)

Upper Division Core (34.5-35 units):
Liberal Studies: Liberal Studies 300, 498 (0.5-1 units).
Mathematics and Science: Mathematics 312², 313²; Physics 412.
Social and Behavioral Sciences: Linguistics 420.
Humanities: English 306A, 306W; History 411, 413; and six units selected from Art 387, Education 451, Music 343.

Focus (14-15 units). All students complete a focus in literacy, mathematics, or science. A minor or second major may not be substituted for a focus.

LITERACY (15 units): Six units selected from Linguistics $253^{3}$ [or Rhetoric and Writing Studies $253^{3}$ ], Linguistics $430^{4}, 452^{4}$; 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, Women's Studies 352; three units selected from English 501, 502, or 503.

MATHEMATICS (15 units):
Breadth Course: Linguistics $253^{3}$ [or Rhetoric and Writing Studies 253 ${ }^{3}$ ].

Mathematics Courses: Mathematics 141, 302, 413; three units selected from Statistics 119 or 250.

SCIENCE (14-15 units):
Breadth Course: Linguistics $253^{3}$ [or Rhetoric and Writing Studies $\left.253^{3}\right]$.

Science Courses: Geological Sciences 412 (4 units), Teacher Education 211B (1 unit); three units selected from Biology 324 or 327; three to four units selected from Chemistry 100 (4 units) or Geological Sciences 303.
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.

## Emphasis in Elementary Education (SIMS Code: 886456)

Preparation for the Major. Complete 46-50 units of lower division core plus Exercise and Nutritional Sciences 241A, 241B (with a grade of C or higher); Mathematics 211 (with a grade of C or higher); Mathematics Education 212; Music 102. Exercise and Nutritional Sciences 241A, 241B and Mathematics 211 may not be taken for Credit/No Credit ( $\mathrm{Cr} / \mathrm{NC}$ ). (55.5-59.5 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 or better in Rhetoric and Writing Studies 280 or 281 before taking English 306W and earn a grade of C (2.0) or higher. 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 (44.5-60 units). [Note: Plus additional lower division courses.]

Upper Division Core (34.5-35 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;
Humanities: English 306A, 306W; History 411, 413; and six units selected from Art 387, Education 451², Music 343.

Focus (17-21 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 (21 units). [Note: Lower and upper division units].
Breadth Courses: Chemistry 308 [Imperial Valley only] or Natural Science 100; Linguistics $253^{3}$ [or Rhetoric and Writing Studies $253^{3}$ ].

Linguistics, Theatre, and Literature Courses: Linguistics $430^{4}$, 4524; 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, Women's Studies 352; three units selected from English 501, 502, or 503.

MATHEMATICS (18 units): [Note: Lower and upper division units].
Breadth Courses: Chemistry 308 [Imperial Valley only] or Natural Science 100; Linguistics $253^{3}$ [or Rhetoric and Writing Studies $253^{3}$ ].

Mathematics Courses: Mathematics 141, 302, 413; three units selected from Statistics 119 or 250.

SCIENCE (17-19 units): [Note: Lower and upper division units].
Breadth Courses: Chemistry 308 [Imperial Valley only) or Natural Science 100; Linguistics $253^{3}$ [or Rhetoric and Writing Studies $253^{3}$ ].

Science Courses: Geological Sciences 412 (4 units); Teacher Education 211B (1 unit); three to four units selected from Biology 101 and 101 L (4 units) $)^{5}, 324,327$; three to four units selected from Chemistry $100^{6}$ (4 units) or Geological Sciences 303.

Option (6-7 units). All students complete an option. Some options lead to additional certifications; see the introduction section for details. To complete an additional $6+$ units in mathematics or science, change to the Mathematics Emphasis or the Science Emphasis.

Linguistics $^{7}$ (6 units): Linguistics 550; Linguistics 555 or 556.
Bilingual (7 units): Dual Language and English Learner Education 415 (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 or 405A and 405B.

Special Education (7 units): Special Education 500, 501, 502 (1 unit) (concurrent registration with Special Education 501);

Performing Arts (6 units): [Not available at the Imperial Valley Campus]: Prerequisites: Music 102; Theatre 310 or 315 . Highly recommended prerequisite: one unit of a performing arts course, such as Music 110A, 110B, 175, 185, 212.

Theatre 510; three units selected from Africana Studies 385, Chicana and Chicano Studies 310 [or Latin American Studies 310], Music 345, 351.
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.
${ }_{5}$ 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 Mathematics (SIMS Code: 886457)

Preparation for the Major. Complete 46-50 units of lower division core and Exercise and Nutritional Sciences 241A, 241B (complete with a grade of C or higher); Mathematics 211 (complete with a grade of C or higher); Mathematics Education 212; Music 102. Exercise and Nutritional Sciences 241A, 241B and Mathematics 211 may not be taken for Credit/No Credit (Cr/NC). (55.5-59.5 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 or better in Rhetoric and Writing Studies 280 or 281 before taking English 306W and earn a grade of C (2.0) or higher. 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 (43.5-47 units). [Note: Plus additional lower division units]

Upper Division Core (34.5-35 units):
Liberal Studies: Liberal Studies 300, 498 (0.5-1 unit).
Mathematics and Science: Mathematics 312¹, 313¹; Physics 412.
Social and Behavioral Sciences: Linguistics 420
Humanities: English 306A, 306W; History 411, 413; and six units selected from Art 387, Education 451, Music 343.

Mathematics Focus (18 units): [Note: Lower and upper division units].

Breadth Courses: Chemistry 308 [Imperial Valley only] or Natural Science 100; Linguistics $253^{2}$ [or Rhetoric and Writing Studies 253²]

Mathematics Courses: Mathematics 141, 302, 413; three units selected from Statistics 119 or 250.

Mathematics Option (9 units): [Note: Lower and upper division units].

Mathematics 150 (4 units), 241 entitled "Mathematics Software Workshop: Geometers Sketchpad" (1 unit), 303; Teacher Education 211A (1 unit).
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.

## Emphasis in Science <br> (SIMS Code: 886458)

Preparation for the Major. Complete 46-50 units of lower division core and Exercise and Nutritional Sciences 241A, 241B (complete with a grade of C or higher); Mathematics 211 (complete with a grade of C or higher); Mathematics Education 212; Music 102. Exercise and Nutritional Sciences 241A, 241B and Mathematics 211 may not be taken for Credit/No Credit (Cr/NC). (55.5-59.5 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 or better in Rhetoric and Writing Studies 280 or 281 before taking English 306W and earn a grade of C (2.0) or higher. 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. (38.5-46) ${ }^{1}$
Upper Division Core (34.5-35 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;
Humanities: English 306A, 306W; History 411, 413; and six units selected from Art 387, Education 451, Music 343.

Science Focus (18-19 units): [Note: lower and upper division units].
Breadth Courses: Chemistry 308 [Imperial Valley only] or Natural Science 100; Linguistics $253^{3}$ [or Rhetoric and Writing Studies $253^{3}$ ].

Science Courses: Chemistry 100 (4 units); Geological Sciences 412 (4 units); Teacher Education 211B (1 unit); three to four units selected from Biology 101 and 101L (4 units) ${ }^{1,4}, 324,327$.

Science Option (7-9 units): [Note: lower division units]
Physics 180A (3 units); three to five units selected from Chemistry 130 (3 units), 200 (5 units) ${ }^{4}$; one additional lower or upper division unit of science selected from Physics 182A (1 unit) ${ }^{4}$ or an alternative course selected with approval of adviser.
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 (Libs)

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 350. International Experience-Fieldwork (1) Cr/NC

(Offered only in the College of Extended Studies)
Prerequisite: Concurrent registration in a three unit faculty led international experience lecture course.

International experience. Guided fieldwork in host country to include observations and tutoring suitable to content of concurrent three unit lecture course. Maximum credit two units.

## LIB S 351. International Experience-Mexicali (1) Cr/NC

(Offered only in the College of Extended Studies)
Prerequisite: Completion of the General Education requirement in Communication and Critical Thinking I.3., Intermediate Composition and 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.

## Linguistics

## In the College of Arts and Letters

## OFFICE: Storm Hall West 214

TELEPHONE: 619-594-5268 / FAX: 619-594-4877 http://www-rohan.sdsu.edu/dept/linguist/index.html

## Faculty

Emeritus: Bar-Lev, Choi, Donahue, Elgin, Frey, Johns, Robinson, Seright, Underhill, Webb
Chair: Osman
Professors: Csomay, Gawron, Higurashi, Kaplan, Osman, Poole, Zhang
Associate Professors: Keating, Kitajima, Malouf, Samraj, Wu Assistant Professors: Bigham, Hansen

## 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).
Certificate in computational linguistics.
Certificate in teaching English as a second or foreign language (TESL/TEFL), basic and advanced.

## 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 two basic certificate programs. The Basic Certificate in Computational Linguistics prepares 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. 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, sociology, and speech, language, and hearing sciences.

Preparation for the Major. Linguistics 101. (3 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 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 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 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 100, 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.

## 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;
Mathematical Tools: Linguistics 570.
Students must obtain a "C" 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, 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 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 "C" 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.

## 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 94. Developmental Writing for International or Bilingual Students (3) Cr/NC
(Same course as Rhetoric and Writing Studies 94)
Prerequisites: A score of 146 and below on the EPT, and nonnative English speakers.

Intermediate written English with emphasis on problems of nonnative speakers; discussion of sentence, paragraph, and essay writing skills. Open only to ESL students who have not satisfied the SDSU Writing Competency requirement. Students earning a grade of "Cr" satisfy the SDSU writing competency requirement. Students receiving a "NC" should re-enroll in Rhetoric and Writing Studies 94 or Linguistics 94.

## LING 100. English Composition for International Students (3) [GE]

Prerequisite: Satisfaction of the English Placement Test and Writing Competency requirements. (See Graduation Requirements section of catalog.) Proof of completion of prerequisite required: Copy of EPT or competency scores (including ISEPT) or verification of exemption; proof of Cr in Rhetoric and Writing Studies 92.

Introduction to college-level written English; attention to English language/grammar needs of non-native speakers of English; grammatical and rhetorical techniques for effective writing, based in part on study of models of current American writing. 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 Rhetoric and Writing Studies 100 or 101.

## 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 English Placement Test and Writing Competency requirements; and Linguistics 100. 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, Chicana and Chicano Studies 200, English 200, or Rhetoric and Writing Studies 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 253. Grammar and Usage for Writers (3)

(Same course as Rhetoric and Writing Studies 253)
Prerequisite: Passage of EPT.
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 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 C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition 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 345. Queer Linguistics (3) [GE]

Prerequisites: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences; Linguistics 101 or major/minor standing in Lesbian, Gay, Bisexual, and Transgender Studies. Recommended: Concurrent registration in Lesbian, Gay, Bisexual, and Transgender Studies 321.

Language, speech, and discourse of lesbian, gay, transgender, and queer communities and people. Queer theory in linguistics and the recognition of specifically queer speakers in general linguistics theory and practice.

## 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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

Computers, computer programming languages, and "artificial intelligence" viewed from perspective of human language.

## LING 363. Sociocultural Analysis of Black Languages (3)

(Same course as Africana Studies 363)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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 520.

## 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)

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)

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]

## (Same course as American Indian Studies 460 and

 Anthropology 460)Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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. (Formerly numbered Linguistics 520.)
LING 502. Language in Mind and Society (3)
Prerequisite: Linguistics 501. Proof of completion of prereq uisite 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)

Prerequisite: 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.

[^13]
## 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 554. Child Language Acquisition (3)

Prerequisite: Linguistics 420 or 501.
Theories and research methods in child language acquisition quantitative and qualitative analyses of data at various levels of grammar (phonology, morphology, lexicon, syntax, and discourse) using language and acquisition corpora.

## 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 570. Mathematical Linguistics (3)

Prerequisite: Two linguistics courses.
Mathematical tools for linguistics: set theory; basic algebraic structures such as groups, lattices, and Boolean algebras; formal language theory; propositional and 1st-order logic. Some emphasis on proofs. Applications to linguistics.

## 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)

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)

Prerequisites: Linguistics 570 or Mathematics 245; Linguistics 571 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 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 College of Business Administration

## OFFICE: Student Services East 3356

TELEPHONE: 619-594-5306 / FAX: 619-594-3272
A Member of the AACSB International - The Association to Advance Collegiate Schools of Business.

## Faculty

Emeritus: Atchison, Belasco, Brady, Butler, Dunn, Ehrlich, Hampton, Hergert, Mitton, Naughton, Robbins, Shore, Wright
Chair: Rhyne
Professors: Chung-Herrera, De Noble, Ryan, Sundaramurthy
Associate Professors: Dean, Ehrhart, Francis, Musteen, Randel, Rhyne, Zheng
Assistant Professors: Ahsan, Fernandez
Lecturers: Robbins, Sannwald

## Offered by the Department

Master of Science degree in business administration.
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 College of Business Administration, 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 College of Business Administration expects that all business students will make reasonable academic progress towards the degree Business premajors who have completed major preparatory courses, 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.

## Business Passport

All majors in the College of Business Administration will be introduced to the Business Passport in Business Administration 310, and complete the Business Passport in the capstone course (Business Administration 404, 405, or 458). Contact the Business Advising Center (EBA-448), 619-594-5828, for more information.

## 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 College of Business Administration.

Upper Division: It is the policy of the San Diego State University College of Business Administration 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 C or higher: 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 threeunit 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 Business Advising Center (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.

## 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 C or higher: 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 <br> (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)

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 College of Business Administration, 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, 483, 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, 483, Recreation and Tourism Management 475.

Students will be required to participate in at least one experiential component. See list of options in the Business Advising Center (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 College of Business Administration, Hospitality and Tourism Management, or International Business should choose courses carefully with an adviser in their major department and the Business Advising Center (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 Business Advising Center (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)

For all majors outside of the College of Business Administration, 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 College of Business Administration, 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 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 College of Business Administration, Hospitality and Tourism Management, or International Business should choose courses carefully with an adviser in their major department and the Business Advising Center (EBA-448).

Students must meet the prerequisites for the minor in effect at the time that they declare the minor. Contact the Business Advising Center (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 COURSES

## MGT 202. Business Professions (1) Cr/NC

Students explore career options, analyze and evaluate career decisions through self assessment and career research. Computer programs and resources in Career Services library used to identify potential career.

## 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)

Prerequisites: Management Information Systems 180. Approved upper division business major, business minor, or another major approved by the College of Business Administration. Proof of completion of prerequisites 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. (Formerly numbered Management 453.)

## MGT 355. International Entrepreneurship (3)

Prerequisite: Approved upper division business major, business minor, or another major approved by the College of Business Administration. 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. (Formerly numbered Management 456.)

## 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 College of Business Administration. 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) Cr/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 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. (Formerly numbered Management 356.)
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 <br> (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 <br> In the College of Business Administration 

## OFFICE: Student Services East 2411 TELEPHONE: 619-594-5316 / FAX: 619-594-3675

A Member of AACSB International-The Association to Advance Collegiate Schools of Business.

## Faculty

Emeritus: Beatty, Easton, G., Feeney, Flatley, Hatch, Lackritz, Langenbach, Lyons-Lawrence, Norman, Sherrard, Spaulding, Vik Chair: Easton, A.
Professors: Briggs, Jennex, Koster, Penrose, Raafat, Reinig, Shin, Yang
Associate Professors: Addo, Easton, A., Plice
Assistant Professor: Wang
Lecturers: Judge, O’Byrne, Probett, Shaul, Tyler

## Offered by the Department

Master of Business Administration.
Master of Science degree in business administration.
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.

## 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.

## Statement on Computers

Before enrolling in upper division courses in the College of Business Administration, 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 College of Business Administration expects that all business students will make reasonable academic progress towards the degree. Business premajors who have completed major preparatory courses, 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.

## Business Passport

All majors in the College of Business Administration will be introduced to the Business Passport in Business Administration 310, and complete the Business Passport in the capstone course (Business Administration 404, 405, or 458). Contact the Business Advising Center (EBA-448), 619-594-5828, for more information.

## 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 College of Business Administration.

Upper Division: It is the policy of the San Diego State University College of Business Administration 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 or higher: 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 Business Advising Center (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.

## 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 or higher: 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. Students must have fulfilled the Writing Placement Assessment with a score of 8 or above before taking Management Information Systems 396W and earn 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 306, 315, 380, 396W, 406, 483, 492; Business Administration 300, 310, 323, 350, 360, 370; Business Administration 404, 405, or 458 (three units); six units selected from Management Information Systems 301, 305, 375, 460, 481, 482, 515, 520. 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

## (SIMS Code: 222337)

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 305, 306, 315, 375, 380, 406, 481, 482, 483, 492, 515, 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. Students with a major in the College of Business Administration, Hospitality and Tourism Management, or International Business should choose courses carefully with an adviser in their major department and the Business Advising Center (EBA-448).

Students must meet the prerequisites for the minor in effect at the time that they declare the minor. Contact the Business Advising Center (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. (Formerly numbered Information and Decision Systems 180.)

## MIS 299. Special Study (3)

Prerequisites: Consent of department chair and instructor.
Individual study.

## UPPER DIVISION COURSES <br> (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 College of Business Administration. Proof of completion of prerequisites required: Copy of transcript.

Statistical methods applied to business decision making. (Formerly numbered Information and Decision Systems 301.)
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 College of Business Administration. 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 College of Business Administration. Proof of completion of prerequisites required: Copy of transcript.

Systems development life cycle concept, with emphasis on analysis of requirements using structured methodology. Feasibility study, needs assessment, prototyping, application design alternatives. (Formerly numbered Information and Decision Systems 306.)

## MIS 315. Business Applications Programming (3)

Prerequisites: Management Information Systems 180. Approved upper division business major, business minor, or another major approved by the College of Business Administration. 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. (Formerly numbered Information and Decision Systems 315.)

## MIS 375. Information Systems Technology (3)

Prerequisites: Management Information Systems 180. Approved upper division business major, business minor, or another major approved by the College of Business Administration. Proof of completion of prerequisites required: Copy of transcript.

Technologies underlying information systems, including computer organization and components, computer arithmetic, I/O and storage, multimedia processing, data communications fundamentals, local area networks, internetworking, and workgroup computing. (Formerly numbered Information and Decision Systems 375.)

MIS 380. Data Management Systems (3)
Prerequisites: Management Information Systems 180. Approved upper division business major, business minor, or another major approved by the College of Business Administration. 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. (Formerly numbered Information and Decision Systems 380.)

## 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 C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition 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. (Formerly numbered Information and Decision Systems 396W.)

## 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. (Formerly numbered Information and Decision Systems 406.)

## 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. (Formerly numbered Information and Decision Systems 460.)

## MIS 481. E-Business/Web Development (3)

Prerequisite: Credit or concurrent registration in Management Information Systems 406. Proof of completion of prerequisite 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. (Formerly numbered Information and Decision Systems 481.)

## MIS 482. Information Technology Projects (3)

Prerequisite: Completion of at least 18 units of upper division management information systems courses. Proof of completion of prerequisite required: Copy of transcript.

Projects with San Diego area client organizations related to information technologies; topics may include: development life cycles, rapid application development, managing teams, client management, group interaction and conflict resolution, software metrics, and quality assurance techniques. (Formerly numbered Information and Decision Systems 482.)

MIS 483. Networks and Data Communications (3)
Prerequisites: Management Information Systems 180. Approved upper division business major, business minor, or another major approved by the College of Business Administration. 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 Information and Decision Systems 483.)
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. (Formerly numbered Information and Decision Systems 492.)

## MIS 496. Selected Topics in Information Systems (1-4) <br> 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 staff. May be repeated with new content. Maximum credit six units. (Formerly numbered Information and Decision Systems 498.)
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. Intermediate 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.

Intermediate programming for business applications with Java, C\# or similar languages. Data structures, control structures, and program structures. Use of object-oriented features, classes, subclasses, and inheritance for modeling and processing of business information. (Formerly numbered Information and Decision Systems 515.)
MIS 520. Advanced Programming for Business Applications (3) Prerequisite: Management Information Systems 515. Proof of completion of prerequisite required: Copy of transcript.

Advanced object-oriented features using Java (abstract classes, polymorphism, interfaces, generic classes) for business application programs using graphical user interfaces. Use of multithreading for business simulation. Enhancement of business applications with multimedia and database connectivity. (Formerly numbered Information and Decision Systems 520.)

GRADUATE COURSES
Refer to the Graduate Bulletin.

# Marketing 

## In the College of Business Administration

## OFFICE: Student Services East 3356

TELEPHONE: 619-594-5317 / FAX: 619-594-3272
A Member of the AACSB International-The Association to Advance Collegiate Schools of Business.

## Faculty

Emeritus: Apple, Baker, Barber, Darley, Haas, Hale, Kartalija, Lindgren, McFall, Sciglimpaglia, Settle, Tyagi, Vanier, Wotruba Chair: Belch
Professors: Belch, Cradit, Krentler, Saghafi
Associate Professors: Dimofte, Honea, Peter
Assistant Professors: Baker, Castro, Cornelis
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, aunch, 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 particpate 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. Successfu 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 College of Business Administration, 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 College of Business Administration expects that all business students will make reasonable academic progress towards the degree. Business premajors who have completed major preparatory courses, 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

## Business Passport

All majors in the College of Business Administration will be introduced to the Business Passport in Business Administration 310, and complete the Business Passport in the capstone course (Business Administration 404, 405, or 458). Contact the Business Advising Center (EBA-448), 619-594-5828, for more information.

## 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 College of Business Administration.

Upper Division: It is the policy of the San Diego State University College of Business Administration 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 o 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 or higher: 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 Business Advising Center (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 or higher: 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 <br> (SIMS Code: 222771)

Forty-seven upper division units consisting of Marketing 371, 470, 479; Business Administration 300, 310, 323, 350, 360, 370. Business Administration 404 or 405; Management Information Systems 301; 15 units selected from Marketing 372, 373, 376, 377, 380, 472, 473, 474, 476, 480, 498, 499. A "C" (2.0) average or better is required in the courses stipulated here for the major.

## Specialization in Integrated Marketing Communications <br> (SIMS Code: 222775)

Forty-seven upper division units consisting of Marketing 371, 373, 470, 472; Business Administration 300, 310, 323, 350, 360, 370. Business Administration 404 or 405; Management Information Systems 301; 11 units selected from Journalism and Media Studies* 375, 408, 440, 460, 480, 560\#, 562\#@, 565 ${ }^{\wedge \# \%}$, 566 ${ }^{\wedge \#}$, 574^; Marketing 380, 476, 480; Psychology 340, 380; Sociology 335. Á "C" (2.0) average or better is required in the courses stipulated here for the major.

* Upper division standing required for all Journalism and Media Studies courses listed.

A Additional prerequisites waived for this course.

* 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.
\% Integrated Marketing Communications students are required to have completed Marketing 470 as a prerequisite to this course.


## Specialization in

## Professional Selling and Sales Management

(SIMS Code: 222776)
Forty-seven upper division units consisting of Marketing 371, 377, 470, 473, 479; Business Administration 300, 310, 323, 350, 360, 370. Business Administration 404 or 405; Management Information Systems 301; seven units selected from Marketing 372, 376, 474, 480, 498, 499. A "C" (2.0) average or better is required in the courses stipulated here for the major.

## Marketing Minor

## (SIMS Code: 222772)

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 Management Information Systems 301^, Marketing 371, 372, 373, 376, 377, 380, 470, 472, 473, 474, 476, 480.

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 College of Business Administration, Hospitality and Tourism Management, or International Business should choose courses carefully with an adviser in their major department and the Business Advising Center (EBA-448).

Students must meet the prerequisites for the minor in effect at the time that they declare the minor. Contact the Business Advising Center (EBA-448) for admissions criteria and procedures.

* Business Administration 370 waived for College of Business Administration, Hospitality and Tourism Management, and International Business majors.
- Students who are required to take Management Information Systems 301 for the major may not take the course for the minor.


## Courses (мктя)

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. A minimum grade of C (2.0) in Business Administration 370 and Management Information Systems 301. 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 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 and Management Information Systems 301 with a minimum grade of C (2.0)

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: Bray, Carlson, Deaton, Eisemann, Elwin, Garrison, Geveci, Grone, Hager, Hintzman, Lesley, Lutz, Marcus, McLeod, Nower, Pierce, Saltz, Short, Smith, Sowder, J., Sowder, L., Thompson, Van de Wetering, Whitman
Chair: O'Sullivan
Professors: Blomgren, Carretero, Castillo, Dunster, Hui, Lobato, Mahaffy, Nemirovsky, O'Sullivan, Palacios, Ponomarenko, Rasmussen, Salamon, Shen, S.
Associate Professors: Bowers, Interlando, Kirschvink, Nickerson, Shen, B.
Assistant Professors: Curtis, Gilles, Luque Santolaria, Zahner

## 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 science.
Teaching major in mathematics for the single subject teaching credential.
Minor in mathematics.
Certificate in communication systems (refer to the Graduate Bulletin). Certificate in mathematics specialist (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;
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.

## 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 48 units in mathematics and statistics courses can apply to the degree.

A minor is not required with this major.
Preparation for the Major. Mathematics 150, 151, 245, 254. (14 units)

Additional Lower Division Coursework Required. Mathematics 242 or Computer Science 107, Mathematics 252, Statistics 250. (10 units) Some lower division courses are prerequisite to science courses applied to the major.

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 27 upper division units selected with approval of the departmental adviser before starting upper division work to include Mathematics 337, 521A, 524, 534A; one course selected from Mathematics 521B, 531, 534B, 537, 538, 542, 543, Statistics 551B; and 12 units of electives.

Master Plan. A master plan of the courses taken to fulfill the major must be approved by the adviser and filed with the Office of Advising and Evaluations.

## 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 three emphases offered in this major: Applied Mathematics, Computational Science, 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.
Preparation for the Major. Mathematics 150, 151, 245, 254. (14 units)

Additional Lower Division Coursework Required. Mathematics 252, Computer Science 107, Statistics 250. (10 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 337,521 A, 534A, 541; 524 or 543 ; 531 or 532 or 534 B; Statistics 350 A or 550 or 551 A ; 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, 311, 312, 313, 315, 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 Office of Advising and Evaluations.

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 <br> (SIMS Code: 776322)

A minor is not required with this major.
Preparation for the Major. Mathematics 150, 151, 245, 254. (14 units)

Additional Lower Division Coursework Required. Mathematics 252, Computer Science 107, 108, Statistics 250. (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.

Major. A minimum of 39 upper division units to include Mathematics 337, 521A, 524 or 543, 534A, 541; 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); and nine units of electives in computer science, mathematics, or statistics (approved by the Applied Mathematics adviser) excluding Mathematics 302, 303, 311, 312, 313, 315, 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 Office of Advising and Evaluations.

## 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.
Preparation for the Major. Mathematics 150, 151, 245, 254. (14 units)

Additional Lower Division Coursework Required. Mathematics 242 or Computer Science 107, Mathematics 252, Statistics 250. (10 units) Some lower division courses are prerequisite to science courses applied to 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 36 upper division units to include Mathematics $337,534 A$; 524 or 543 ; 532 or 534 B; at least six units selected from Mathematics 521A, 525, 531, 532, 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, 311, 312, 313, 315, 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 Office of Advising and Evaluations.

## 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.
Preparation for the Major. Mathematics 150, 151, 245, 254. (14 units)

Additional Lower Division Coursework Required. Mathematics 241, 252, Statistics 250, Teacher Education 211A. (9 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 the 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 mathematics to include Mathematics 302, 303, 414, 521A, 534A, 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 Office of Advising and Evaluations.

## 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 EntryLevel Mathematics Examination. 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 241, 245, 252, 254, 302, 303, 414, 510, 521A, 534A, 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 Departmental Placement Examination

All students who expect to enroll in Computer Science 100, 107, Mathematics 105, 118, 120, 122, 124, 141, 150, 210, 211, Statistics 119, 250 must satisfy the Entry-Level Mathematics Examination requirement. For Mathematics 150, 311, and 312, students must also pass the required part of the Mathematics Departmental Placement Examination. For Mathematics 150, certain prerequisite courses taken at San Diego State University may be used to satisfy the Mathematics Departmental Placement Examination requirement.

## COMPUTER SCIENCE

(See this section of catalog under Computer Science)

## STATISTICS

(See this section of catalog under Statistics)

## Courses (матн)

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 Entry-Level Mathematics requirement required for Mathematics 105, 118, 120, 122, 124, 141, 150, 210, 211: Copy of ELM score or verification of exemption.

MATH 105. College Algebra (3) [GE]
Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.

Real numbers, graphs, theory of functions, sinusoidal equations, and their applications to science. Excel and Maple programming. Not open to students with credit in Mathematics 121, 124, or 141.

## MATH 118. Topics in Mathematics (3) [GE]

Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.

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]
Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.

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 122. Calculus for the Life Sciences II (3) [GE]
Two lectures and two hours of activity.
Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.

A continuation of Mathematics 121 with topics from integral calculus and an introduction to elementary differential equations. 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: Satisfaction of the Entry-Level Mathematics requirement.

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 121 and 122, or 150.

## MATH 141. Precalculus (3) [GE]

Two lectures and two hours of activity.
Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.

Real numbers, inequalities; polynomials; rational, trigonometric, exponential and logarithmic functions; conic sections. Not open to students with credit in Mathematics 105, 121, 124, or 150.

## MATH 150. Calculus I (4) [GE]

Three lectures and two hours of activity.
Prerequisites: 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) satisfaction of the EntryLevel Mathematics requirement and qualification on the Mathematics Departmental Precalculus Proficiency Examination. Proof of completion of prerequisites required.

Algebraic and transcendental functions. Continuity and limits. The derivative and its applications. The integral and the fundamental theorem of calculus.

## MATH 151. Calculus II (4) [GE]

Three lectures and two hours of activity.
Prerequisite: Mathematics 150 with minimum grade of C . 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]
Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.

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 211. Geometry in Elementary Mathematics (3) [GE] <br> Prerequisites: Satisfaction of the Entry-Level Mathematics

 requirement and 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 241. Mathematics Software Workshop (1)

Prerequisite: Mathematics 150.
Introduction to mathematical software environment such as MATLAB, MAPLE, MATHEMATICA or the Geometers Sketchpad. May be repeated for credit with different software. See Class Schedule for specific content. Maximum credit two units.

## MATH 242. Mathematical Programming (3) <br> Prerequisite: Mathematics 124 or 150.

Rudiments of programming mathematical and scientific problems on various platforms which include: EXCEL, Matlab, and Maple.

## MATH 245. Discrete Mathematics (3) [GE]

Prerequisite: Mathematics 124 or 150. 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 minimum grade of $C$.
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.
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.

## UPPER DIVISION COURSES <br> (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 311. Statistics and Probability in Elementary

Mathematics (2)
Prerequisites: Mathematics 211 and satisfactory performance on Mathematics Departmental Placement Examination, Part LS.

Topics from statistics and probability. Enrollment limited to liberal studies majors. Not open to students with credit in Mathematics 312.

## 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. Not open to students with credit in Mathematics 311.

## 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 315. Special Topics in Algebra, Geometry, and Problem

 Solving (2)Prerequisites: Mathematics 210, 311.
Capstone course for prospective elementary teachers to include algebra (describing change), geometry (rigid motions), and non-routine problem solving.

## MATH 336. Introduction to Mathematical Modeling (3) <br> Prerequisite: Mathematics 254.

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 342A.
Integration of first-order differential equations, initial and boundary value problems for second-order equations, series solutions and transform methods, regular singularities.

## 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 minimum grade of C.
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)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

## UPPER DIVISION COURSES <br> (Also Acceptable for Advanced Degrees)

NOTE: Proof of completion of prerequisites required for all upper division courses: Copy of transcript.
MATH 509. Computers in Teaching Mathematics (3)
Two lectures and three hours of laboratory.
Prerequisite: Mathematics 252.
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 122, 124, or 151.
The foundations of Euclidean and hyperbolic geometries. Highly recommended for all prospective teachers of high school geometry.

## MATH 521A. Abstract Algebra (3)

Prerequisites: Mathematics 245 and 254.
Abstract algebra, including elementary number theory, groups, and rings.
MATH 521B. Abstract Algebra (3)
Prerequisite: Mathematics 521A.
Continuation of Mathematics 521A. Rings, ideals, quotient rings, unique factorization, noncommutative rings, fields, quotient fields, and algebraic extensions.

## MATH 522. Number Theory (3)

Prerequisite: Mathematics 245.
Theory of numbers to include congruences, Diophantine equations, and a study of prime numbers; cryptography.

## MATH 523. Mathematical Logic (3)

Prerequisite: Mathematics 245.
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 254; or 342A.
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.
Linear codes, perfect and related codes, cyclic linear codes, BCH codes, burst error-correcting codes.

## MATH 531. Partial Differential Equations (3)

Prerequisites: Mathematics 252 and 337.
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.
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.
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 534A. Advanced Calculus I (3)

Prerequisites: Mathematics 245 and 254; or 342A.
Completeness of the real numbers and its consequences, sequences of real numbers, continuity, differentiability and integrability of functions of one real variable.

## MATH 534B. Advanced Calculus II (3)

Prerequisite: Mathematics 534A.
Series and sequences of functions and their applications, functions of several variables and their continuity, differentiability and integrability properties.

## MATH 537. Ordinary Differential Equations (3)

Prerequisite: Mathematics 337.
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)

Prerequisites: Minimum grade of C in Mathematics 151; Mathematics 254 or 342A, 342B.

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 541. Introduction to Numerical Analysis and Computing (3)
Prerequisites: Mathematics 254 or 342A; and Mathematics 241 or 242 or Computer Science 106 or 107.

Solution of equations of one variable, polynomial interpolation and approximation, numerical differentiation and quadrature, linear least squares approximation, the fast Fourier transformation.

## MATH 542. Introduction to Computational Ordinary of

 Differential Equations (3)Prerequisites: Mathematics 337 and 541.
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) <br> Prerequisite: Mathematics 541.

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.
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.
Permutations, combinations, generating functions, recurrence relations, inclusion-exclusion counting. Polya's theory of counting, other topics and applications.

## 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

## Mathematics Specialist <br> Certificate Program

The Mathematics Specialist Certificate Program for Grades K-6 is open only to credentialed teachers. The certificate program is described in the Graduate Bulletin in the Mathematics and Science Education section. Undergraduate mathematics and mathematics education courses for the certificate program are listed below.

## Courses (mThed \& 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 COURSE IN MATHEMATICS EDUCATION (Intended for Undergraduates) (MTHED)

NOTE: Proof of completion of Entry-Level Mathematics requirement required for Mathematics 105, 118, 120, 122, 124, 141, 150, 210, 211: Copy of ELM score or verification of exemption.
MTHED 212. Children's Mathematical Thinking (1-1.5)
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.

## UPPER DIVISION COURSE IN MATHEMATICS EDUCATION (Also Acceptable for Advanced Degrees)

MTHED 574. Children's Mathematics Understanding in Upper Elementary Grades (Part II) (1-3)
Prerequisite: Admission to mathematics specialist certificate program

Ongoing assessment and instructional decision-making for increasing children's achievement and understanding of rational numbers, geometry and measurement in the upper elementary grades. Maximum credit three units.

## UPPER DIVISION COURSES IN MATHEMATICS

(Also Acceptable for Advanced Degrees)
(MATH)
NOTE: Proof of completion of prerequisites required for all upper division courses: Copy of transcript.

## MATH 501A. Reasoning: Place Value and Arithmetic

 Operations (1)Prerequisites: Teaching credential and consent of instructor
Place value and its role in development and understanding of arithmetic operations, to include numeration systems, student methods, standard algorithms, and mental computation.

## MATH 501B. Reasoning: Rational Numbers and Real Number

 Systems (1)Prerequisites: Teaching credential and consent of instructor.
Rational numbers and structure of real number system, to include meanings and models for fractions with attention to operations on rational numbers.
MATH 504A. Reasoning: Quantities and Mathematical Relationships (1)
Prerequisites: Teaching credential and consent of instructor
Reasoning about measurable characteristics in problem context. and relationships among these measurements. Additive, multiplicative reasoning, and proportional reasoning in middle grades.
MATH 504B. Reasoning: Algebra and Nature of Change (1)
Prerequisites: Teaching credential and consent of instructor.
Pattern searching, generalizing, graphing to represent quantitative relationships, and role of these topics in preparing elementary and middle school students for algebra.

## MATH 506A. Algebra in the Middle Grades I (3)

Prerequisites: Teaching credential and consent of instructor
Mathematical foundations that underlie concepts and procedures emphasized in algebra I and algebra II as taught at middle and high school level, to include focus on real number system, ratios, proportional reasoning, equality, number theory, and proof.

## MATH 506B. Algebra in the Middle Grades II (3)

Prerequisites: Mathematics 506A, practicing teachers with valid teaching credential, and consent of instructor.

Mathematical foundations that underlie concepts and procedures emphasized in algebra I and algebra II as taught at middle and high school level, to include focus on functions in context of relations, patterns, and graphing.

## MATH 507A. Functions and Study of Change I (2)

Prerequisites: Mathematics 506B, practicing teachers with valid teaching credential, and consent of instructor.

Mathematical ideas surrounding linear functions and change to include proportionality, slope, and graphing. Arithmetic and geometric sequences.

## MATH 507B. Functions and Study of Change II (3)

Prerequisites: Mathematics 507A, practicing teachers with valid teaching credential, and consent of instructor.

Mathematical ideas surrounding nonlinear functions and variable rates of change to include quadratic and exponential situations.

GRADUATE COURSES
Refer to the Graduate Bulletin.

# Mechanical Engineering 

## In the College of Engineering

## OFFICE: Engineering 326

TELEPHONE: 619-594-6067
E-MAIL: me@engineering.sdsu.edu
http://mechanical.sdsu.edu
The undergraduate program in Mechanical Engineering is accredited by the Engineering Accreditation Commission (EAC) of ABET, Inc., 415 North Charles Street, Baltimore, MD 21201; telephone: 410-347-7700.

## Faculty

Emeritus: Bedore, Craig, Hoyt, Hussain, Impelluso, Lybarger, Mansfield, Murphy, Ohnysty
Chair: Moon (Interim)
Professors: Beyene, Bhattacharjee, German, Kline, May-Newman, Mehrabadi, Moon, Morsi, Olevsky
Associate Professors: Kassegne, Miller
Assistant Professors: Akbari Hamed, Battiato, Naseradinmousavi

## 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.

## General Education

Students will complete a minimum of 50 units in General Education, to include a minimum of nine upper division units taken after attaining junior class standing. No more than 12 units may be used for General Education credit from any one department or academic unit. No more than 7 units from one department can be used in Sections II and IV combined (Foundations of Learning and Explorations of Human Experience), nor more than 10 units from one department in Sections II, III, and IV combined (Foundations of Learning, American Institutions, and Explorations of Human Experience).
I. Communication and Critical Thinking: 9 units

You may not use Credit/No Credit grades in this section.

1. Oral Communication (3 units)
2. Composition (3 units)
3. Intermediate Composition and Critical Thinking (3 units)
II. Foundations of Learning: 29 units
A. Natural Sciences and Quantitative Reasoning (17 units):
4. Physical Sciences (11 units)

Engineering students will take Chemistry 202 (4 units) or Chemistry 200 (5 units).

Physics 195 (3 units)
Physics 195L (1 unit)
Physics 196 (3 units)
2. Life Sciences (3 units)

Mechanical engineering majors will take Biology 100 or 101. Students in bioengineering emphasis will take Biology 203.
3. Laboratory (satisfied under A.1. above)
4. Mathematics/Quantitative Reasoning Engineering students will take Mathematics 150 (3 units applicable to General Education). You may not use Credit/No Credit grades.
B. Social and Behavioral Sciences (3 units)
C. Humanities (9 units)

Complete three courses in three different areas. One of these courses and the one under IV.A. below must be taken in the same department.
III. American Institutions: Three units of the six units of coursework which meet the American Institutions graduation requirement may be used to satisfy this section, excluding courses numbered 500 and above.
IV. Explorations of Human Experience: Courses in this area must not be taken sooner than the semester in which you achieve upper division standing ( 60 units passed). Upper division courses in the major department may not be used to satisfy General Education. Total nine units; must include one course of cultural diversity.
A. Upper division Humanities (3 units)

Three units must be taken from the same department as one of the Humanities courses selected in Foundations of Learning.
B. Upper division Social and Behavioral Sciences (3 units).
C. Upper division Social and Behavioral Sciences (Engineering majors may satisfy this area with an additional American Institutions course (excluding 500-level) to complete the American Institutions requirement if this requirement was not completely satisfied with lower division coursework) (3 units).

## The Major

Mechanical engineers work on diverse, challenging problems that require the integration of science, engineering, and socioeconomic knowledge. Mechanical engineers develop solutions to physical problems, question how things work, make things work better, and create ideas for doing things in new and different ways. As a mechanical engineering student, you'll cover a broad scope of topics to prepare you for a successful engineering career.

Jobs in mechanical engineering include developing products to improve air and water quality, inventing more efficient energy sources, designing farm equipment to improve crop yield throughout the world, and developing systems for biological research as well as lifesaving medical equipment. A mechanical engineer, now more than ever, is someone who can translate scientific theories into the real products and processes to improve the quality of life.

Mechanical engineers are designers, and the program is dedicated to teaching engineering through the process of design. Design methodology and design projects are integrated throughout the curriculum, culminating in a capstone, design experience in the senior year where students are members of a design team.

The future depends on solving the worldwide problems of energy shortages, environmental pollution, world health, and inadequate food production. Mechanical engineers are actively involved in finding solutions for these problems. The emphasis in bioengineering prepares students for employment in industry, or for higher professional degrees in medicine, or bioengineering

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 (B.S. and M.S. in Mechanical Engineering) and the BS/MS $4+1$ degree program (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

## Educational Objectives

The objectives of the mechanical engineering program are to produce Bachelor of Science graduates who:

1. Will be able to use their strong grounding in the core fundamentals of mechanical engineering, basic science, and mathematics in their future careers;
2. Will be able to employ an open minded but critical approach to the analysis of problems and design of systems, keeping in mind the technical, professional, societal, environmental, economic, and ethical dimensions of any solution;
3. Will be prepared for successful careers and have an appreciation of the need for life-long learning in a rapidly changing field;
4. Will be productive engineers with a broad appreciation of the world and the role that engineering plays in society.
Mechanical engineering students will have the following abilities upon graduation: knowledge of mathematics, science, and engineering; design and conduct experiments, analyze and interpret data; design a system, component, or process to meet desired needs; function on multidisciplinary teams; identify, formulate, solve engineering problems; understanding of professional and ethical responsibility; communicate effectively; understand impact of engineering solutions in a global and societal context; recognition of need for and an ability to engage in life-long learning; knowledge of contemporary issues; techniques, skills, and modern engineering tools necessary for engineering practice; apply principles of engineering, basic science, and mathematics (including multivariate calculus and differential equations) to model, analyze, design, and realize physical systems, components or processes; work professionally in both thermal and mechanical systems areas.

## 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 or higher: 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 (Cr/NC);
b. Have an overall cumulative GPA of 2.5.

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)

All students in mechanical engineering pursue a common program of basic sciences, engineering, and mechanical engineering fundamentals. The major consists of 48 upper division units. 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 101, 102, 200 [or Aerospace Engineering 200], 202, 204 (or Physics 196L), 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, 197. (53 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 or higher. These courses cannot be taken for credit/no credit (Cr/NC).

General Education. Engineering students must follow the specific General Education program outlined in this section of the catalog. Other general education requirements and limitations, as well as listings of specific General Education course electives are presented in the General Education section of Graduation Requirements for the Bachelor's Degree.

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, 452, 490A, 490B, 495, 520, 555; Aerospace Engineering 340, 341. Professional electives: Nine units of additional coursework may be selected from any 400- or 500-level mechanical engineering course, Aerospace Engineering 515, 535, Construction Engineering 430, 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 <br> (SIMS Code: 447002)

Preparation for the Major. Mechanical Engineering 101, 102, 200 [or Aerospace Engineering 200], 202, 204 (or Physics 196L), 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. Three to five units selected from: Biology 212, Chemistry 201, Chemistry 232 and Chemistry 232L, or Physics 197. (53-56 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 or higher. These courses cannot be taken for credit/no credit ( $\mathrm{Cr} / \mathrm{NC}$ ).

General Education. Engineering students must follow the specific General Education program outlined in this section of the catalog except for area IV. Explorations of Human Experience. Students with this emphasis are required to take Biology 336 to satisfy three units of upper division Natural Sciences in place of IV.B.

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, 452, 490A, 490B, 499 (three units), 520, 555, 580, and 585; Aerospace Engineering 340, 341; Biology 336; Biology 436 or Mechanical Engineering 496 Bioengineering Systems Laboratory (two units). Biology 336 will also satisfy three units of the General Education requirement in IV.B.

## BS/MS 4+1 Degree Program <br> B.S. and M.S. in Mechanical Engineering <br> (SIMS Code: 447012)

Students must complete 160 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 950 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 500-level courses may be used to fulfill the elective requirements for the 4+1 $B S / M S$ 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 160 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 950 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 $B S / M S 4+1$ 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 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. Pro/ Engineer 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. Pro/Engineer and SolidWorks software. Finite element analysis of mechanical components using Pro/Mechanica and SolidWorks simulation software. Computer numerical controlled manufacturing using Pro/ Manufacturing software.

## M E 200. Statics (3)

(Same course as Aerospace Engineering 200)
Prerequisites: Physics 195 and credit or concurrent registration in Mathematics 151. Proof of completion of prerequisites required: Copy of transcript or registration confirmation.

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.
Prerequisites: Mechanical Engineering 101 and credit or concurrent registration in Mathematics 151. Recommended: Mechanical Engineering 102.

Principles of C programming to solve selected numerical methods. Syntax topics include data types, loops, control flow, arrays, memory acquisition, functions. Algorithm topics include Gauss Reduction and Newton Raphson. Matlab implementations. Application areas in mechanical engineering include finite element, dynamics, computational fluid mechanics, physics based computer animation.

## M E 204. Mechatronics Preparation Laboratory (1)

Three hours of laboratory.
Prerequisites: Electrical Engineering 204 and Mathematics 151.
Simulated and hands-on circuit experiences with instrumentation and data acquisition, sensors and actuators to include transformers, op amps, digital gates, flip flops, motors, various transducers, sensors and actuators.

## M E 220. Dynamics (3)

(Same course as Aerospace Engineering 220)
Prerequisite: Mechanical Engineering 200 or Aerospace Engineering 200 with a grade of C or better. Proof of completion of prerequisite 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)
Prerequisites: Chemistry 202 (or 200) and credit or concurrent registration in Mechanical Engineering 200 or Aerospace Engineering 200. Proof of completion of prerequisites required: Copy of transcript and evidence of concurrent registration in Mechanical Engineering 200 or Aerospace Engineering 200

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: Credit or concurrent registration in 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 is acceptable as proof. In addition, Mechanical Engineering 351 and 490A require evidence of concurrent registration in appropriate courses.
M E 304. Mechanics of Materials (3)
Prerequisite: Mechanical Engineering 200 or Aerospace Engineering 200.

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 102, 202, and Aerospace Engineering 220 or Mechanical 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 102, 202, 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. Control Systems Laboratory (3)
Two lectures and three hours of laboratory.
Prerequisites: Mechanical Engineering 202, 204; Electrical Engineering 204; Aerospace Engineering 220 or Mechanical Engineering 220; Aerospace Engineering 280; Aerospace Engineering 340; Linguistics 200 or Rhetoric and Writing Studies 200.

Control theory (e.g. stability, feedback, PID control) with applications in microprocessor-based control of dynamic, vibrational, and mechatronic systems. "Bread-boarding" and BASIC programming of microcontrollers and graphical programming of PC-based controller interfaces.

## M E 350. Thermodynamics (3)

Prerequisites: Mathematics 252 and Mechanical Engineering 200 or Aerospace Engineering 200.

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)

Prerequisites: Mechanical Engineering 350 and credit or concurrent registration in Aerospace Engineering 340.

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 452. Principles of Heat Transfer (3)

Prerequisites: Mechanical Engineering 350 and Aerospace Engineering 340.

Analytical and numerical solutions of steady and transient one- and two-dimensional conduction problems, forced and natural convection in external and internal flows, and thermal radiation. Applications.

## M E 490A-490B. Engineering Design: Senior Project (3-3)

One lecture and four hours of guided design activities.
Prerequisites for 490A: Mechanical Engineering 304 (or Civil Engineering 301), 310, 314, 452. Biology students enrolling in this course must have completed Biology 366, Electrical Engineering 204, Mechanical Engineering 350, and have credit or concurrent registration in Biology 590.

Prerequisites for 490B: Mechanical Engineering 490A, 495. Biology majors: Mechanical Engineering 490A and Biology 590.

Applications of engineering principles and design techniques to the designing, building, and testing of an engineering system. 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. Proof of completion of prerequisite required: Copy of transcript.

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. Proof of completion of prerequisite required: Copy of transcript.

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 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. Not open to students with credit in Mechanical Engineering 540.

## M E 540. Nonmetallic Materials (3)

Prerequisites: Mechanical Engineering 314.
Fundamentals of ceramics, polymers, and composite materials. Materials design and selection. Statistical methods of brittle materials design, appropriate for ceramic materials, and rheological modeling of polymeric materials. Stress and strain analysis using classical lamination theory of multi-ply composite laminates. Not open to students with credit in Mechanical Engineering 535.
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 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, 452, and Aerospace Engineering 340.

Application of thermodynamics, fluid mechanics and heat transfer to the thermal design of solar energy conversion systems. Computer simulations utilized.

## M E 580. Biomechanics (3)

Prerequisites: Mechanical Engineering 304 (or Civil Engineering 301) and Aerospace Engineering 340.

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: Aerospace Engineering/Mechanical 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 Aerospace Engineering/Mechanical 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. Proof of completion of prerequisite required: Copy of transcript.

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.

# Military Science 

In the College of Professional Studies and Fine Arts

## OFFICE: Exercise and Nutritional Sciences 451

TELEPHONE: 619-594-4943 / FAX: 619-594-7084

## Faculty

Chair: Turner
Professor: Turner
Assistant Professors: Armas, Cotte, Hughes, Jason

## 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. Uniforms, 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 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 Initial Entry Training (CIET) 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 \$300-500 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 (mils)

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 mid-level 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.

## Music

In the College of Professional Studies and Fine Arts

## OFFICE: Music 112

TELEPHONE: 619-594-6031 / FAX: 619-594-1692
E-MAIL: music.dance@sdsu.edu

## Faculty

Emeritus: Almond, Barra, Biggs, Bruderer, Chambers, Estes, Forman, Genzlinger, Helzer, Hogg, Kolar, Meadows, Mitchell, O'Donnell, Peterman, Sheldon, Stauffer, Ward-Steinman
Director: Friedrichs (Interim)
Professors: Conaty, Dutton, Follingstad, Liebowitz, McDonald, Waters, Yeager
Associate Professors: Delgado, Friedrichs, Rewoldt, Smigel, Thompson, Walders
Assistant Professor: Kitelinger
Lecturers: Ayres, Bolzenthal, Hibbs, Nikkel, 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: Dutton
Flute: Martchev, P.
Harp: Mashkovtseva
Horn: McCoy
Jazz Guitar: Boss
Jazz Studies: Thompson, Yeager
Non-Western Instruments: Specialists from specific cultures as available each semester
Oboe: Conaty, Skuster
Percussion: Cohen, Holguin
Piano: Follingstad
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 for the single subject teaching credential.
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 higher. Music 205B and Accountancy 201 must be completed with a grade of C or higher. These courses 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).

## 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.) 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 $C$ or higher is required in each semester of the $C M$ 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, 206A; three 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; four units selected from courses numbered 370-389; 408A, and four 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, six 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. (42-45 units)

Students must have a cumulative GPA of 2.9 or higher. Music 205B and Accountancy 201 must be completed with a grade of C or higher. These courses cannot be taken for credit/no credit (Cr/NC).

Prior to enrolling in upper division College of Business Administration 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 College of Business Administration, 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, 160, four units selected from Music 170 through 189; 205A, 205B, two units of Music 207, 260, 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 as evaluated in a language competency examination administered by the head of the vocal area.
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

## (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) 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 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 kindergarten-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 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. May be repeated with new content. See Class Schedule for specific content. 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
F. Strings
B. Voice G. Classical Guitar
C. Woodwinds
D. Brass
H. Harp
E. Percussion
K. Non-Western Instruments

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
G. Classical Guitar
B. Voice
H. Harp
C. Woodwinds
I. Jazz Instruments
D. Brass
K. Non-Western Instruments
E. Percussion
L. Composition
F. Strings

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 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 <br> (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) <br> 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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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 110B 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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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 electroacoustic 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 <br> (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 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 Practices for Performers (2)

(Same course as Dance 390)
One lecture and two hours of activity.
Prerequisite: Music 290 or Dance 290 with a grade of C or better.
Analysis, investigation, and physical realization of movement theory systems to include body modalities of yoga, Pilates, Alexander technique.

## 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: 20 ${ }^{\text {th }}$ and 21 $^{\text {st }}$ 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 two hours of activity.
Prerequisites: Music 205B, 210A, 346, 347 with a grade of C (2.0) or better.

Early field experience. Students will complete 20 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
F. Strings
B. Voice
G. Classical Guitar
C. Woodwinds
H. Harp
D. Brass
E. Percussion

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
G. Classical Guitar
B. Voice
H. Harp
C. Woodwinds
I. Jazz Instruments
D. Brass
K. Non-Western Instruments
E. Percussion
L. Composition
F. Strings

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 514. Volunteerism in the Arts (3)
Prerequisite: Upper division standing.
Study of volunteerism and its effects on non-profit organizations and the creation and implementation of volunteer projects in partnership with local non-profit performing arts organizations.

## MUSIC 515. Professional Orientation for Music Performers (2)

One lecture and two hours of activity.
Prerequisite: 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. (Formerly numbered Music 518A.)

## MUSIC 530. Music Internship (1-3)

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/NCPrerequisite: 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

## OFFICE: Physics 131

TELEPHONE: 619-594-6240
http://www-rohan.sdsu.edu/~natsci

## Faculty

Emeritus: Dowler, Feher, Fisher, Goldberg, May, Wallace
Faculty: Kimbrough (Geological Sciences)

## Offered by Natural Science

Teaching major in physical science 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 high school 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 either pass the appropriate CSET examinations or complete an approved academic program. The single subject teaching credential in science subject matter preparation program described below satisfies the academic requirements for a student planning to teach integrated science and physics at the secondary level. Entrance into the post-baccalaureate credentialing program in part requires certification of subject matter competency by this program. 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.

## 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).

## Additional Requirements for Subject

## Matter Preparation Certification

Satisfactory Grades. A 2.0 or higher grade point average based on all upper division courses is required for the major. 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.

## Courses (nsci)

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 ten 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.


## Naval Science

## In the College of Professional Studies and Fine Arts

OFFICE: Communication 130
TELEPHONE: 619-594-3985 / 619-594-1134 / 619-594-1135
FAX: 619-594-7848 / 619-260-6821

## Faculty

Chair: Johnson
Professor: Johnson
Associate Professor: Dickerson
Assistant Professors: Billhardt, Gladfelter, Johnson, Long, Nelson, Thornton

## 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 <br> (Intended for Undergraduates)

## NAV S 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 410. Amphibious Operations (3)
Amphibious warfare, doctrinal origins, and its evolution as an element of naval policy during the twentieth century.

## Nursing

## In the College of Health and Human Services

## OFFICE: Adams Humanities 3138

TELEPHONE: 619-594-5357 / FAX: 619-594-2765

## 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, California Board of Registered Nursing, and the Commission on Collegiate Nursing Education.

## Faculty

Emeritus: Broom, Dillon (Salerno), Flagg, Freitas, Hatton, Heineken,
Hines, Laiho, LaMonica, Lantz, Leslie, Lookinland, Loveridge, Moffett, Morris, Reed, Riegel, Robinson, Saarmann, Shively, Stichler, Sweeney, Todero, Verderber, Wahl, Walker, Wozniak Director: Greiner
Associate Director: Peck
Professors: Blenner, Fields, Greiner, Hunter
Associate Professors: Fitzsimmons, Gates, Hadley, Lee
Assistant Professors: Attin, Carlson
Lecturers: Bass, Bidwell, Burns, Casey, Concilio, Cullum, DeSilva, Finkel, Gribble, Hall, Herold, Jurf, Kari, Katzman, Lischke, Long, McEwan, Miller, Moreno, Parr, Peck, Preston, Rivera, Samad, Scott

## Offered by the School

Doctor of Nursing Practice.
Master of Science degree in nursing
Concentration in advanced practice nursing of adults and the elderly.
Concentration in community health nursing
Concentration in nursing education
Concentration in nursing leadership in health care systems.
Concentration in women's health and midwifery.
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 earn a grade of $C$ - to F in two nursing or prerequisite courses or in one course twice will be dropped from the program. 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 website 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 must have completed one year of high school college preparatory courses in intermediate algebra, biology, and chemistry with laboratory;
b. Transfer students must have completed the same requirements as entering freshmen or equivalent college-level courses;
c. Biology 211, 211L, 212, 261*, Chemistry 102^, Statistics 250 (or Biology 215 or Psychology 280)^, Communication 103 (or a course listed under General Education, I.1. Oral Communication)*, Rhetoric and Writing Studies 100 (or a course listed under General Education, I.2. Composition)", and Rhetoric and Writing Studies 200 (or a course listed under General Education, I.3. Intermediate Composition and Critical Thinking) ${ }^{\mathbf{L}}$ with the required grades (B- or above for all biology courses, C or above for all others). These courses cannot be taken for credit/no credit (Cr/NC). (Note: registration in Biology 261 may be concurrent with the start of nursing department courses);
d. Have a cumulative GPA of 3.2 or higher.

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).

## 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 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. Students with the highest grade point averages and test scores will be ranked for admission. 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*, Chemistry 102*, Statistics 250 (or Biology 215 or Psychology 280) ${ }^{\wedge}$, Communication 103 (or a course listed under General Education, I.1. Oral Communication) ${ }^{\leftarrow}$, Rhetoric and Writing Studies 100 (or a course listed under General Education, I.2. Composition) ${ }^{\text {I }}$, and Rhetoric and Writing Studies 200 (or a course listed under General Education, I.3. Intermediate Composition and Critical Thinking) ${ }^{\mathbf{A}}$ or their equivalents with the required grades ( B - or above for all Biology courses, C or above for all others).
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* (Note: registration in Biology 261 may be concurrent with the start of nursing department courses).
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.
« Upper division transfer students fulfill this course requirement with a CSU GE certified B1 chemistry course (general, organic, inorganic, or integrated).
^ Upper division transfer students fulfill this area with a statistics course certified for CSU GE mathematics/quantitative reasoning (B4).
$\because$ Upper division transfer students fulfill this area with any certified CSU GE oral communication (A1) transfer course.

- Upper division transfer students fulfill this area with any certified CSU GE written communication (A2) transfer course.
- Upper division transfer students fulfill this area with any certified CSU GE critical thinking (A3) transfer course

3. Minimum Grade Point Average. Students must complete the eight prerequisite courses with a minimum overall grade point average of 3.0. Academic progress must be maintained.
4. Mathematics and Writing Competency Requirements. Prior to beginning clinical nursing courses, all students must satisfy the SDSU mathematics and writing competency requirements.
5. 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 Schoo of Nursing website.
6. 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. Students eligible for this option should contact the School of Nursing RN to BS adviser for special advising and program planning.
7. Formal Application. Applicants must submit an application to the university according to deadlines for impacted programs. Transfer students: In addition to the university application, an application to the nursing program must be submitted during the semester transfer students are completing prerequisites for the nursing program. RN to BS students: the nursing program application should be submitted the semester before they wish to enroll. Application forms, deadlines, and current information may be obtained on the School of Nursing website at http://nursing.sdsu.edu

## Special Instructions

1. Impacted Program. The nursing major is designated as an impacted program and specific regulations related to admissions are imposed
2. Full-Time/Part-Time Study. Students are encouraged to enroll in all of the nursing courses scheduled each semester. However, parttime enrollment can be arranged by contacting the undergraduate adviser within the school and with approval of the Director
3. Transportation. Students enrolled in the nursing program are required to provide their own transportation to off-campus clinical agencies and for home visits.
4. 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.
5. 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.
6. Malpractice Insurance. Malpractice insurance is provided by the CSU at this time. Check website for any changes
7. 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.
8. 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.
9. A valid social security number may be required for placement in most clinical agencies and to take the RN NCLEX examination.
10. 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

- BIOL 211 211L Fundamentals of Microbiology
- BIOL 261 Human Physiology ............................................ 4

NURS 304 Clinical Pharmacology in Nursing Practice . 2
NURS 312 Concepts in Professional Nursing ............... 3
\#@ NURS 316 Psychiatric-Mental Health Nursing ............. 5
NURS $400 \quad$ Nursing Care of the Acute and Chronically III Adult and Gerontologic Patient II ...... 3.5
NURS 400L Nursing Care of the Acute and Chronically III Adult and Gerontologic Patient II Laboratory 2.5

NURS 458 Nursing Management and Leadership........ 3
NURS 458L Nursing Management and Leadership Laboratory

2
NURS 499 Special Study (elective in the clinical or health focus of student's choice) 1

Total 30

* 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.
@ Includes management/evaluation of patient care.


## General Education Requirements

Students will complete a minimum of 49 units in General Education to include a minimum of nine upper division units. No more than 12 units may be used for General Education credit from any one department or academic unit. Upper division transfer students are required to complete an approved CSU General Education pattern. Students seeking a second bachelor's degree in nursing have satisfied all requirements in sections I, II, III, and IV of General Education with their first baccalaureate degree from a regionally accredited association.

## I. Communication and Critical Thinking: 9 units

You may not use Credit/No Credit grades in this section.

1. Oral Communication: Communication 103, or Africana Studies 140, or Chicana and Chicano Studies 111A (3 units)
2. Composition (3 units)
3. Intermediate Composition and Critical Thinking (3 units)
II. Foundations of Learning: 32 units
A. Natural Sciences and Quantitative Reasoning (14 units):
4. Physical Sciences: Chemistry 102 (5 units)
5. Life Sciences: Biology 212 (4 units)
6. Laboratory: Biology 211 L (2 units)
7. Mathematics/Quantitative Reasoning:

Biology 215 (3 units) or
Psychology 280 (4 units) or
Statistics 250 (3 units) - Recommended
You may not use Credit/No Credit grades.
B. Social and Behavioral Sciences (6 units) to be satisfied by:

Psychology 101 (3 units) - Required
Sociology 101 (3 units) - Recommended
C. Humanities (12 units)

Refer to General Education course offerings in the Graduation Requirements section of the catalog.
Note: Upper division transfer students should refer to the footnotes under the Admission to the Professional Program in Nursing section.
III. American Institutions: Three units of the six units of coursework which meet the American Institutions graduation requirement may be used to satisfy this section, excluding courses numbered 500 and above.
IV. Explorations of Human Experience: Coursesinthis areamustnot be taken sooner than the semester in which you achieve upper division standing ( 60 units passed). Upper division courses in the major department may not be used to satisfy General Education. Nine units to include Philosophy 330 and one of the following options: three upper division units in Natural Science, and three upper division units in Social and Behavioral Sciences; OR three upper division units in Humanities, and three upper division units in Social and Behavioral Sciences; OR six upper division units in Social and Behavioral Sciences. Three units must be selected from a course designated as cultural diversity. Refer to General Education Requirements section of the catalog and to the course guidelines provided during program orientation.

## 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 554603 - Internal SDSU, Transfers) (SIMS Code Track 1: 554605-First Time Freshmen Admits) (SIMS Code Track 2: 554606 - First Time Freshmen Admits)

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*, Chemistry 102*, Statistics 250 (or Biology 215 or Psychology 280) ${ }^{\wedge}$, Communication 103 (or a course listed under General Education I.1. Oral Communication)**, Rhetoric and Writing Studies 100 (or a course listed under General Education, I.2 Composition)", and Rhetoric and Writing Studies 200 (or a course listed under General Education, I.3. Intermediate Composition and Critical Thinking) ${ }^{\boldsymbol{A}}$, 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)

- 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.
$\star$ Upper division transfer students fulfill this course requirement with a CSU GE certified B1 chemistry course (general, organic, inorganic, or integrated).
^ Upper division transfer students fulfill this area with a statistics course certified for CSU GE mathematics/quantitative reasoning (B4).
$\because$ Upper division transfer students fuffill this area with any certified CSU GE oral communication (A1) transfer course.
- Upper division transfer students fulfill this area with any certified CSU GE written communication (A2) transfer course.
- 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.

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 earn a grade of C- to F in two nursing or prerequisite courses or in one course twice will be dropped from the program.

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 an 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 and community service activity in the U.S. 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;
5. General Studies 450;
6. Health and Human Services 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. This program gives credit for previous coursework. Students eligible for this option should contact the School of Nursing for special advising and program planning.

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.
2. Official transcript showing AD Degree or Diploma.
3. Official transcripts from all colleges/universities attended to date.
4. CPR certification - "Healthcare Provider" or "Professional Rescuer" level.
General Education Requirements. See General Education Requirements for nursing major.

International Experience. Nursing majors are required to participate in an 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 and community service activity in the U.S. 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;
5. General Studies 450;
6. Health and Human Services 350.

Curriculum Plan. A total of 120 units are required for the degree. Transfer credit for 27 or more nursing units is 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:

| NURS 307 | Nursing Research................................................ 3 |
| :---: | :---: |
| NURS 312 | Concepts of Professional Nursing .................. 3 |

## AND

NURS 400L Nursing Care of the Acute and Chronically III Adult and Gerontologic Patient II Laboratory ....2.5

## OR

NURS 499 Special Study 3-3
NURS 415 Community Health Nursing .............................................. 3
NURS 415L Community Health Nursing Laboratory ....................... 2
NURS 458 Nursing Management and Leadership ................. 3
NURS 458L Nursing Management and Leadership Laboratory ... 2

## 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 200. Informatics for the Nurse (1)

Prerequisite: Admission to nursing major.
Basics of informatics, electronic health records, ethics and legal aspects. Electronic communication. Database searches.

## 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, evidence-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 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 302. Nurse-Client Relationships: Cultural and Mental Health Concepts (3)

Prerequisite: Nursing 206.
Nurse-client communication and application to clinical nursing practice. Origins of a variety of communication styles. Cultural and mental health concepts related to communication.

## 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 toxicologica 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 psychosocia 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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A. Natural Sciences and Quantitative Reasoning.

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 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 302 or 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 302 or 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 358. Basic Electrocardiography (1) Cr/NC

Prerequisite: Nursing 300.
Basic electrophysiological and interpretive concepts necessary for identification and management of supraventricular and ventricular

## rhythms.

## 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 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 <br> 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 two units applicable to a bachelor's degree.

## 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

## http://ens.sdsu.edu

Didactic Program in Dietetics is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) - Academy of Nutrition and Dietetics.

## Faculty

Emeritus: Beshgetoor, Boggs, Cooke, Dickerson, Josephson, Spindler
Director: Kolkhorst
Professor: Kern
Associate Professor: Hong
Assistant Professor: Hooshmand-Yazdi
Lecturers: Lane, Rupp

## 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 nutrition, food science, and food management founded on prerequisite courses in chemistry, biology, biochemistry, physiology, accounting, management, and the behavioral and social sciences. 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. The accredited didactic program in foods and nutrition allows students eligibility for membership in the Academy of Nutrition and Dietetics and for post-baccalaureate dietetic internships or preprofessional practice programs. Students must be admitted to and complete satisfactorily a post-baccalaureate program and pass the Academy of Nutrition and Dietetics Registration Examination prior to qualifying for registration as dietitians.

Professional careers in dietetics include administrative, therapeutic, teaching, research, and public service positions in hospitals, schools, clinics, 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.

## 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 or higher must be earned in Chemistry 100 and 130. These courses cannot be taken for credit/no credit (Cr/NC);
b. Have a cumulative GPA of 2.90 or higher.

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 or higher 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 an 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 and community service activity in the U.S. 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;
5. General Studies 450;
6. Health and Human Services 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, 326; Business Administration 350*, Communication 307*, 371; Counseling and School Psychology 320, 400; Management 352*; Nursing 350; Psychology 319*; Public Health 301*, 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.

[^14]
## 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) Composition, or 3) Intermediate Composition and 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 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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning.

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 American Dietetic Association. 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 and Community Health (3)

Two lectures and three hours of activity
Prerequisites: Grade of C or better in Nutrition 203, 302, 302L 304, and consent of instructor.

Nutritional problems in the community with consideration of their resolution. Field placement experience required.

## NUTR 596. Advanced Studies in Nutrition (1-6)

Prerequisite: 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 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 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 loca 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, and completion of the General Education requirement in Foundations of Learning II.A., Natural Sciences and Quantitative Reasoning.

Scientific, socioeconomic, and geopolitical perspectives on human impacts upon the global ocean system to include ocean warming and acidification, regional fisheries depletion, and loca 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. 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
http://www-rohan.sdsu.edu/dept/linguist/index.html

## Faculty

Chair: Osman

## Offered by the Department of

 Linguistics and Asian/Middle Eastern Languages
## Courses 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]

Prerequisites: Persian 202 and completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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]

Prerequisites: Persian 301 and completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Writing complex literary and expository texts. Reading modern and classical texts to include complicated media. Producing, understanding debates and speeches.
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
http://philosophy.sdsu.edu

## Faculty

Emeritus: Anderson, Chaffin, Feenberg, Freeman, Moellendorf, Nelson, Rosenstein, Shields, Troxell, Warren, Weber, Weissman Chair: Atterton
Professors: Atterton, Corlett, Francescotti, Wawrytko, Weston
Associate Professors: Barbone, Wheeler
Lecturers: Reyes, Schlesinger

## 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 300-level philosophy courses will count toward the major.

## Philosophy Minor

## (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 (PHLL)

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 110. Critical Thinking and Composition (3) [GE]
Prerequisites: Satisfaction of the English Placement Test and Writing Competency requirements and Africana Studies 120 or American Indian Studies 120 or Chicana or Chicano Studies 111B or English 100 or Linguistics 100 or Rhetoric and Writing Studies 100 or 101. 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.

## PHIL 120. Introduction to Logic (3) [GE]

Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.

Introduction to deductive and inductive logic. Logic and language. Analysis of fallacies. Uses of logic in science and in daily life

## 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 305. Classics of Western Philosophy (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Analysis of major texts selected from diverse historical periods in Western philosophy. Texts will illustrate different world views (e.g., Platonism, Stoicism, Skepticism) and their relationship to other disciplines and to present world views.

## PHIL 310. Philosophy and Human Nature (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Concept of human nature. Descriptive and normative aspects of major theories of human nature.
PHIL 312. Women and Philosophy (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Study of literature of philosophical significance and of philosophical problems of literature. (Formerly numbered Philosophy 334.)

PHIL 325. A Major Philosophical Topic (3)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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 329. Social Ethics (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Value judgments upon which medicine is based and the ethical issues which medicine faces.

PHIL 331. Ethics in Health Care (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Ethical, professional, and legal standards. Promoting patient wellbeing given competing interests, diverse cultural and religious beliefs, increasing demands, practical constraints

## PHIL 332. Environmental Ethics (3) [GE]

## (Same course as Sustainability 332)

Prerequisite: Completion of General Education requirement in Foundations of Learning II.C., Humanities.

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 340. Morality of War and Peace (3) [GE]

Prerequisite: Completion of General Education requirement in Foundations of Learning II. C., Humanities

Historical and contemporary arguments regarding morality of war, pacifism, and terrorism, with contemporary applications.

## PHIL 341. Logic and the Law (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Understanding and application of the law via contemporary moral controversies in case law and legal practice.
PHIL 344. Global Justice (3) [GE]
Prerequisite: Completion of General Education requirement in Foundations of Learning II. C., Humanities.

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 348. Morality and Climate Change (3) [GE]

Prerequisite: Completion of General Education requirement in Foundations of Learning II. C., Humanities.

Moral questions and policy responses that arise from existing and projected anthropogenic climate change.
PHIL 351. Chinese Philosophy (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Intellectual traditions within Buddhism, both ancient and contemporary, including key areas of metaphysics, epistemology, and axiology.

## PHIL 375. Symposium in Philosophy (3)

Prerequisite: Three units in philosophy.
Different philosophers from different areas in philosophy (e.g. metaphysics, ethics, aesthetics) present series of 13 to 15 lectures on one particular issue (e.g. Darwinism, free will, war and peace). May be repeated with new content. Maximum credit six units.

## PHIL 401A. History of Philosophy: Pre-Socratic through Medieval (3)

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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)Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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 <br> (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 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.


## Physics

## In the College of Sciences

## OFFICE: Physics 131

TELEPHONE: 619-594-6240 / FAX: 619-594-5485
E-MAIL: physdept@mail.sdsu.edu
http://www.physics.sdsu.edu

## Faculty

Emeritus: Burnett, Cottrell, Day, Feher, Goldberg, Lilly, Morris,
Oseroff, Piserchio, Rehfuss, Roeder, S., Shackelford, Shore,
Templin, Wallace, Wolter
Chair: Sinha
Professors: Davis, Johnson, Papin, Sweedler, Torikachvili, Weber
Associate Professors: Anderson, Baljon, Tambasco
Assistant Professor: Kuznetsova
Lecturers: Bass, Chalmers, Mardirossian
Adjunct: Bendall, Jani, Mueller

## 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 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." Individual master plans for each student are filed with both the physics undergraduate adviser and the Office of Advising and Evaluations. 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, $317,350,354,357,360,400 A-400 B, 410$; 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." Individual master plans for each student are filed with both the physics undergraduate adviser and the Office of Advising and Evaluations.

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 <br> (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." Individual master plans for each student are filed with the physics and chemistry undergraduate advisers and the Office of Advising and Evaluations.

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 $(\mathrm{W})$ 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 Subject <br> 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 Entry-Level Mathematics 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 Entry-Level Mathematics 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) <br> 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 wave motion, sound, electromagnetic waves, optics, relativity, and modern physics.
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 with a minimum grade of C. 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) <br> 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. (Formerly numbered Natural Science 412.)

## 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 538. Polymer Science (3)

## (Same course as Chemistry 538)

Prerequisites: Chemistry 200 or 202; and Chemistry 410B or Physics 360 or Mechanical Engineering 350

Structure, synthesis, physical properties, and utilities of polymers.

## 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.
lonizing radiation fields, interactions of radiation with matter, cavity theory, external radiation dosimetry.

## PHYS 561. Nuclear Instrumentation (3)

One lecture and six hours of laboratory.
Prerequisites: Physics 311 and 560.
Radiation detection, measurement, and spectroscopy. Ionization chambers, GM and proportional counters, scintillation and semiconductor detectors, and thermoluminescent 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

## In the College of Arts and Letters

## OFFICE: Nasatir Hall 126 <br> TELEPHONE: 619-594-6244 / FAX: 619-594-7302

## Faculty

Emeritus: Andrain, Fairlie, Gupta, Heck, Hobbs, Hofstetter, Johns, Keiser, Lewin, Little, Loveman, Miles, Schultze, Soule, Strand
Chair: Schreiber
Professors: Adams, Alexseev, Carruthers, Graubart, Guang, King, McCall, Schreiber
Associate Professors: Abdel-Nour, Branch, Kennedy, Kuru, Maher, Saccarelli, Varadarajan
Assistant Professors: Baer, Fletcher, O'Brien
Lecturers: Bee, Gastelum, Ingram, Mercurio, 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 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, 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; claims adjuster or claims representative; statistical technician; marketing researcher; lobbyist for a business or trade organization; political reporter; and title office trainee.

## 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 C or higher: 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 (Cr/NC);
b. Have a cumulative GPA of 2.40 or higher.

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 or higher.

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. 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 (a) 24 upper division units in political science (students are permitted to take up to six units selected from Africana Studies 321, 322, American Indian Studies 485, Women's Studies 375), provided that at least three units are taken in each field; and (b) 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, 347A-347B, 348, 422, 425, 426, 428, 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, 370, 555, 560, 562, 564, 565, 566, 567, 568.

Field IV. International Politics: Political Science 375, 380, 393, 478, 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 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.

## 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, Political Science 347A, 347B, 348, 541, 577, Sociology 443,543 , Women's Studies 370. Students must obtain a grade of C 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 call 619-594-6245 for additional information.

## Courses (pols)

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) [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) [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]

Prerequisites: Satisfaction of the Entry-Level Mathematics requirement; course in intermediate algebra; Political Science 101 and 102.

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; 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]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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) [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 <br> UPPER DIVISION COURSES <br> (Intended for Undergraduates) 

## POL S 320. The U.S. Constitution (3) [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) [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)

(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)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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]Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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) [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. (Formerly numbered Political Science 547A-547B.)

## POL S 347B. American Constitutional Law: Civil Rights and Civil

 Liberties (3) [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. (Formerly numbered Political Science 547A-547B.)

## 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) [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. Political Behavior (3)

Prerequisite: Political Science 102.
Social and attitudinal variables in political behavior. Quantitative research data as used in electoral studies. May include a substantia amount of material about foreign political systems.

## 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)
Prerequisites: Completion of the American Institutions requirement and the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.
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]

Prerequisites: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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 <br> (Intended for Undergraduates)

## POL S 356. Politics of Europe (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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]
Prerequisites: Political Science 101 or 103; and completion of the General Education requirement in Foundations of Learning II.B.,
Social and Behavioral Sciences required for nonmajors.
Internal political systems, governmental structures and the foreign policies of developing nations.

## POL S 362. Governments and Politics of East Asia (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

The internal political structure and foreign policies of China, Japan, and Korea.
POL S 363. Governments and Politics of the Middle East (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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]

Prerequisites: Political Science 101, 102 or 103; and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

Underlying conditions, expressions, and consequences of violence within political systems.

## UPPER DIVISION COURSES <br> (Intended for Senior and Graduate Students) <br> (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 567. Political Systems of Latin America (3)

Prerequisite: Political Science 566.
Domestic and international politics of selected Latin American states.

## 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 <br> (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 478. Conduct of American Foreign Relations (3)

Institutional arrangements by which American foreign policy decisions are formulated and implemented. Issues confronted by American foreign policy decision makers.

## POL S 479. National Security Policy (3)

Objectives, instruments, and consequences of national security policy.

## POL S 482. International Relations of the Latin American

 States (3)Foreign policies of Latin American states; the Organization of American States; relationships with the United Nations and the United States.

## 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 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. (Formerly numbered Political Science 497.)

## 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

Chair: Blanco
Professor: Blanco
Associate Professor: Urzua Beltran
Assistant Professor: Vasconcelos

## Offered by the Department of

## Spanish and Portuguese Languages and Literatures

Minor in Portuguese.

## 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 Minor

(Minor Code: 11079) (SIMS Code: 115701)
The minor in Portuguese consists of a minimum of 15 units, nine of which must be approved upper division courses, to include at least six units of 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 minor: Portuguese 101, 201, 299, 301, 307 [or Latin American Studies 307], 401, 443, 499, 535.

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 301 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, 201, 301 taken out of sequence.
PORT 101. Elementary / Intensive Portuguese I (5) [GE]
Five lectures and one hour of laboratory.
Prerequisite: Three years of high school Romance language or two semesters of college romance language.

Pronunciation, oral practice, reading on Luso-Brazilian culture and civilization, essentials of grammar. Not open to students with credit in Portuguese 201, 301, or higher-numbered Portuguese course.

## PORT 201. Elementary/Intensive Portuguese II (5) [GE]

Prerequisite: Portuguese 101.
Continuation of Portuguese 101. Not open to students with credit in Portuguese 301 or higher-numbered Portuguese course.

## 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 <br> (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 301. Intermediate Portuguese Reading and

 Composition (3) [GE]Prerequisites: Portuguese 201; and completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Culture-centered oral and written language, based on Portuguese and Brazilian texts. Review of grammar.

## PORT 307. Brazilian Music and Culture (3) [GE]

(Same course as Latin American Studies 307)
Prerequisites: Upper division standing; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 401. Advanced Portuguese Reading and Composition (3) [GE]
Prerequisites: Portuguese 301; and completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Continued development of reading comprehension and writing skills. Review of grammar through use of literary and cultural materials. May be taken concurrently with Portuguese 307 [or Latin American Studies 307].

## PORT 443. Contemporary Luso-Brazilian Civilization (3)

Prerequisite: Portuguese 401.
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 COURSE

 (Also Acceptable for Advanced Degrees)
## PORT 535. Brazilian Literature (3)

Prerequisite: Portuguese 401
Important movements, authors, and works of the literature of Brazil from the colonial period to modern times.


# 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 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, visit http://psfa.sdsu.edu/intl minor.
*Additional prerequisites required.

## 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 Development (3) [GE]
Key concepts, definitions, and measures of sustainable development. Interrelationships between biodiversity and society. Integrated view of science of sustainable development.

## 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]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

Common elements shared by various artistic forms. 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 330. Artistic Practice in the Digital Age (3)
Two lectures and two hours of activity
Prerequisite: Upper division standing
Multidisciplinary artistic practice related to digital technologies with emphasis on works that encourage new media collaboration and interaction with audiences. Critical issues pertinent to art and technology that seek to depict, question, and transform our cultural landscape.

## 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]Prerequisites: Upper division standing and completion of the General Education requirement in Foundations of Learning II.B. Social and Behavioral Sciences

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 430. Art and Technology Workshop (3)

Six hours of activity
Prerequisite: Grade of C or better in Professional Studies and Fine Arts 330.

Collaborative and/or interdisciplinary practical experience in digital media using various approaches to the creative process in the arts. Maximum credit six units.
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 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 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

## In the College of Sciences

## OFFICE: Life Sciences 110 <br> TELEPHONE: 619-594-5358

UNDERGRADUATE ADVISING OFFICE: Life Sciences 105
TELEPHONE: 619-594-5412 / FAX: 619-594-1332
http://www.psychology.sdsu.edu

## Faculty

Emeritus: Borges, Bryson, Defran, Dicken, Dunn (IVC), Fenson, Franzini, Graham, Graf, Hillix, Hornbeck, Hunrichs, Kass, Koppman, Leckart, Lee, Litrownik, Lynn, Marshall, Martin, McCordick, McDonald, Mollenauer, Plotnik, Price (Judy), Psomas, Reed, Reilly, Rodin, Saccuzzo, Sallis, Sattler, Schulte, Scott, Scollay, Segal, Spinetta, Stevens
Chair: Matt
Associate Chair: Ehrhart
Resident Adviser: Ulloa
Professors: Amir, Atkins, Castañeda (IVC), Cronan, Devos, Gallo, Gilbert, Hattrup, Hirshman, Holcomb, Klonoff, Malcarne, Marlin, Matt, Mattson Weller, McGivern, Müller, Murphy, Price (Joseph), Prislin, Riley, Roesch, Thomas, Twenge
Associate Professors: Brasser, Conte, Cordero (IVC), Ehrhart, Friend, Kath, Marinkovic, Marx, Weersing, Yeh
Assistant Professors: Sadler, Vaughn, Wells
Lecturer: Laumakis

## 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 liberal arts and sciences OR applied arts and sciences.
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, Program Development, 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. 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 or higher: 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 or higher. 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 (Biology 215; Civil Engineering 160; Economics 201; Political Science 201; Sociology 201; Statistics 119 or 250) combined with Psychology 281 in lieu of Psychology 280.
b. Have a cumulative GPA of 2.50 or higher.

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 make an appointment at the Psychology Undergraduate Advising Office (Life Sciences 105) during their first semester of residence at SDSU. Students who plan to transfer as psychology majors should make an appointment before registering. The Advising Office is open year round and may be contacted at 619-594-5412, psychology.advising. sdsu@mail.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 Liberal Arts and Sciences
(Major Code: 20011) (SIMS Code: Liberal 778301 OR
Applied Arts and Sciences (Open only to AA-T/TMC)

## (Major Code: 20011) (SIMS Code: Applied 778307)

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.

## General Requirements for the Major

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 (Cr/NC). The minimum grade in each class is C or higher. 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 (Biology 215; Civil Engineering 160; Economics 201; Political Science 201; Sociology 201; Statistics 119 or 250) combined with Psychology 281 in lieu of Psychology 280.

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.

Language Requirement. For the Liberal Arts and Sciences degree, 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." Psychology majors are urged to discuss scheduling the language requirement with an adviser in the Psychology Undergraduate Advising Office.

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.

The Major. 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 B 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 selected from a list of content courses covering areas of biological, developmental, abnormal, social, personality, cognitive, and sensation/perception.

Requirements for the Major. A minimum of 31 upper division units in psychology to include Psychology 301 or 410 and either four courses or 12 units, including at least one course or three units from each of the following groups. The remaining course or three units are selected from Group II or Group III.

Group I. One of the following:
Psychology 340 or 344.
Group II. At least one of the following:
Psychology 319;
Psychology 331 or 332;
Psychology 333 or 350 .
Group III. At least one of the following:
Psychology 360 or 361 or 362;
Psychology 380;
Psychology 388.
An additional 14-15 elective units selected from 300- to 500-level psychology courses to satisfy the 31 units required for the psychology major.

## Recommendations for 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) <br> Psychology Certificate <br> (Offered only in the College of Extended Studies) <br> (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 the College of Extended Studies. 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 the College of Extended Studies.

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 the College of Extended Studies 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: Manypsychology 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 201. Academic and Career Opportunities in

 Psychology (1) Cr/NCPrerequisites: 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. Learning (3)

Prerequisite: Psychology 101.
Basic principles and research in animal and human learning.
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 170, 270, or Teacher Education 170.

## 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.
Prerequisites: Psychology 101; satisfaction of the Entry-Level Mathematics requirement. Proof of completion of prerequisites required: Copy of ELM score or verification of exemption.

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; Political Science 201; Sociology 201; Statistics 119 and 250.

## PSY 281. Data Analysis in Psychology (2)

One lecture and two hours of laboratory in computer laboratory.
Prerequisites: Satisfaction of the Entry-Level Mathematics requirement and credit in a three-unit statistics course without a computer laboratory component. Proof of completion of prerequisites 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 310. Psychology of Environmental Sustainability (3)

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

Concepts of natural environment and psychological factors supporting more environmentally sustainable behaviors. Theory and research from multiple areas of psychology to include cognitive, developmental, cultural, social, ergonomic, industrial/organizational, and health psychology.

## PSY 316. Behavior Modification (3) <br> (Offered only at IVC)

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 prerequisites 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 C 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 C 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 C 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]

Prerequisites: Psychology 101; completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences

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)

Prerequisites: Psychology 101; completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences

Causes and treatment of abnormal behavior with emphasis on major behavior disorders.

## PSY 351. Psychology of Personality (3) [GE]

Prerequisites: Psychology 101; completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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 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 eventrelated 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, depen dence, 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: Grade of B or better in Psychology 280 or equivalent statistics course; grade of B or better in Psychology 301. 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. Cognitive Psychology (3)

Prerequisite: Psychology 101. Recommended: Psychology 211.
Theory and research on attention, learning, memory, thinking, understanding, and language.
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, a grade of B or better in Psychology 280 or equivalent statistics course. 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 412. Advanced Laboratory in Social Psychology (5)
Two lectures and six hours of activity.
Prerequisite: Psychology 410. Proof of completion of prerequisite required: Copy of transcript.

Experimental literature, assigned and original laboratory projects in the field of social 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 456. Psychology of Death and Bereavement (3)
Latest psychological research and clinical practice in the area of death and dying, geared to assisting the student in appropriate ways of aiding both the dying and the bereaved in coming to terms with death.

## 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) Cr/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/NCPrerequisite: 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 501. History of Psychology (3)

Prerequisite: Limited to graduate students or psychology majors with senior standing.

Historical background of modern psychology.
PSY 561. Advanced Neuropsychology (3)
Prerequisite: Psychology 360 or 361 or grade of B or better in Psychology 260.

Biological bases of neuropsychological function and dysfunction, relationships between brain structure and function, neuropsychological assessment tools.

## PSY 587. Advanced Principles of Learning and Cognition (3)

Prerequisites: Psychology 211, 280, and 380. Limited to graduate students or psychology majors with senior standing.

Empirical data, basic principles and theoretical positions of major theorists in learning and cognitive psychology.
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 National Association of Schools of Public Affairs and Administration (NASPAA).

## Faculty

Emeritus: Boostrom, Calavita, Coates, Dobbs, Gazell, Gilbreath, Gitchoff, Henderson, Kitchen, Lee, Rea, Ryan, R., Sparrow, Stock, Sutton, Wilson
Director: Henry
Professors: Caves, Henry, Herzog, Pugh, Ryan, S
Associate Professors: Flanigan, Kaplan, Mclllwain, Mobley, Nurge, Sabath
Assistant Professors: Abdel-Samad, Appleyard, Chanin, Espinosa

## 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 Imperial Valley Campus 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 careers adviser. The Public Administration Center within the School of Public Affairs provides a comprehensive file of current job openings locally, throughout California, and across the country.

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 or higher: 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 (Cr/NC);
b. Complete a minimum of 60 transferable semester units;
c. Have a cumulative GPA of 2.40 or higher;

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. Note: Students may only double count one elective course also taken to satisfy the university upper division Explorations of Human Experience requirement. 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 for a copy of the guide or download it at http://spa.sdsu.edu/web/ index.php/academic_programs/pa_undergraduate_program.

## 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, 330, 340, 450, 460, 497 or 498; and Public Administration 320, 420, 525, and Public Administration 341 and 350.

Master Plan. Students should follow the Master Plan Advising Guide to ensure completion of major requirements. Contact the School for a copy of the guide or download it at http://spa.sdsu.edu/web/ index.php/academic_programs/pa_undergraduate_program.

## Public Administration Minor

## (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 (Imperial Valley Campus Only)

## (SIMS Code: 666930)

To receive the certificate a candidate must complete an approved program of 18 units with a minimum grade point average 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 (PA)

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 <br> (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.

## P A 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)

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.

## P A 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.

## P A 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.
P A 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 IVC)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) <br> 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.
P A 460. Administration and Public Policy Development (3)
Process of formulating public policy with emphasis on the role of public agencies.

## P A 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.

## P A 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 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.

## P A 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.

## P A 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.

## P A 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. Public Administrative Systems Analysis (3)

Prerequisites: Public Administration 301 and a statistics course.
Systems and organization analysis; work standards and units; procedures analysis; administrative planning.

## P A 571. Managing Water and Energy Resources (3)

 (Offered only at IVC)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 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 <br> TELEPHONE: 619-594-6317 / FAX: 619-594-6112 <br> http://publichealth.sdsu.edu

## Faculty

Emeritus: Burgess, Chang, de Peyster, Elder, Hofherr, Koch, Mayer, McTaggart, Noto, Peddecord, Seidman, Senn, Slymen, Sorochan Director: Gersberg (Interim)
Undergraduate Adviser/Division Head: Kreisworth
Professors: Ayala, Brodine, Gersberg, Hovell, Macera Novotny, Quintana, Shaffer, Stoskopf, Talavera, Yu
Associate Professors: Alcaraz, Arredondo, Buhi, Chowdhury, Corliss, Finlayson, Hoh, Kiene, Lindsay, Madanat
Assistant Professors: Baek, Lemus, Schiaffino

## Offered by the Graduate 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 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 health science with the B.S. degree in applied arts and sciences.

Emphasis in public health.
Minor in health science.
Certificate in preventive medicine residency (refer to the Graduate Bulletin).
Certificate in public health
(refer to the Graduate Bulletin).

## The Major

The health science major with an emphasis in public health, 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.

## Impacted Program and Standards for Admission

The health science major with an emphasis in public health is an impacted program. To be admitted to the emphasis in public health, students must meet the following criteria:
a. Receive a grade of B or higher in Public Health 101, 290, and 295. 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 (Cr/NC);
c. Complete all courses in preparation for the major with a minimum GPA of 2.75;
d. Have a cumulative GPA of 2.75 or higher.

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.

## Health Science Major

With the B.S. Degree in Applied Arts and Sciences (Major Code: 12011)

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 Public Health <br> (SIMS Code: 552841)

Preparation for the Major. Public Health 101, 290, 295; Biology 100, 100L, 211, 211L, 212; Chemistry 100; Psychology 101; Sociology 101; Statistics 119 or 250. (34 units)

Public Health 101, 290, and 295 may not be taken Cr/NC. The minimum grade for Public Health 101, 290, and 295 is B or higher. Each remaining course in preparation for the major must be completed with a minimum grade of C. 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 health science majors are required to participate in an 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 and community service activity in the U.S. 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;
5. General Studies 450;
6. Health and Human Services 350.

Major. A minimum of 45 upper division units to include Public Health 301, 302, 303, 304, 305, 402, 490A, 490B, 490C; Biology 336; and at least 15 units selected from the following:
A. Twelve units of electives from Public Health 331, 353, 362, 450, 451, 452, General Studies 330, 340. Other electives as selected and offered by the Graduate School of Public Health, with approval of academic adviser.
B. Three units from one of the following categories:

Preprofessional. Science courses selected with approval of Graduate 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.
Practice. Public Health 497 (Supervised Field Experience); internship from a list of selected public health agencies.
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.

## Health Science Minor

## (SIMS Code: 552801)

The minor in health science consists of a minimum of 18 units, to include 12 units of Public Health 101, 290, 301, 302, and six units selected from Public Health 303, 304, 305.

Public Health 101 and 290 must be completed with a grade of $B$ or higher and students must have a cumulative GPA of 2.75 or higher 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.

NOTE: Students who are not pre-health science or health science majors may take the following public health courses with consent of instructor.

## 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 290. Health Professions and Organizations (3)

Prerequisite: Credit or concurrent registration in Public Health 101 Open only to pre-health science majors and minors.

Health organization and agencies, locally, regionally, nationally, and internationally. Types of public health settings, and responsibilities in different types of health careers and public health positions.

P H 295. Public Health Research (3)
Prerequisites: Public Health 101 and 290. Open only to pre-health science 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
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 301. Foundations and Practice of Public Health (3)
Prerequisites: Public Health 101 and 290 with grades of B or better. Open to health science majors and minors.

Organization of public health field, role of government and voluntary agencies in protecting and promoting health of individuals, groups, and communities

## P H 302. Communicable and Chronic Disease (3)

Prerequisites: Credit or concurrent registration in Public Health 301. Open to health science 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)
Prerequisites: Public Health 301 and 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)
Prerequisites: Public Health 301 and 302.
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)

Prerequisites: Public Health 301 and 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 331. Emergency Preparedness and Disaster Response (3)

Prerequisites: Public Health 301 and 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 353. Human Sexuality and Disease (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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. Not open to students with credit in Community Health Education 475

## P H 362. International Health (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences,

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 402. Public Health Communications (3)
Prerequisites: Public Health 303. Open only to health science majors.

Effective communicationtechniques 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.
P H 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 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 303 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.
GRADUATE COURSES
Refer to the Graduate Bulletin.

# Recreation and Tourism Management 

## 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 436 <br> TELEPHONE: 619-594-4964 / FAX: 619-594-4443 <br> http://www.sdsu.edu/htm

Accredited by the National Recreation and Parks Association.

## Faculty

Emeritus: Dixon, Duncan, Hanson, Hutchinson, Lamke, Peterson, Rankin
Director: Winston
Professors: Beck, Gattas
Associate Professors: Ponting, Sasidharan
Lecturers: Greenberg, Hemmens, Lustig

## 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 organi zation, 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, cultura 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.

## 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, 326, 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.

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; Hospitality and Tourism Management 450.
(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 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 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 <br> (Intended for Undergraduates)

## RTM 304. Leisure and Tourism (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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]
Prerequisites: Biology 100 or 101; and completion of the General Education requirement in Foundations of Learning II. B., Social and Behavioral Sciences.

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 C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition 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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences.

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) Cr/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.

## Regulatory Affairs

In the College of Sciences

OFFICE: Geology/Mathematics/Computer Science 617 TELEPHONE: 619-594-6030 / FAX: 619-594-6381
E-MAIL: cbbd@sciences.sdsu.edu
http://regsci.sdsu.edu

## Interim Director: Catherine J. Atkins, Ph.D.

Graduate Adviser: Lorah W. Bodie, Ed.D.

## Offered by Regulatory Affairs

Master of Science degree in regulatory affairs.
Certificate in intellectual property and regulatory affairs (refer to the Graduate Bulletin).
Certificate in regulatory affairs, advanced (refer to the Graduate Bulletin).

Course (RA)
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 COURSE (Intended for Undergraduates)

## R A 460. Healthcare Product Regulations (1)

Healthcare product regulation of pharmaceutical, biotechnology, and biodevice industries. Foundational knowledge of U.S. Food and Drug Administration and laws and regulations they are responsible for enforcing.

GRADUATE COURSES
Refer to the Graduate Bulletin.


# 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@mail.sdsu.edu
http://religion.sdsu.edu

## Faculty

Emeritus: Downing, Frost, Gefter, Holler, Khalil, Sparks
Chair: Levitt Kohn
Professors: Levitt Kohn, Mohammed, Moore, Timalsina
Associate Professor: Hansen
Assistant Professors: Choi, Whitaker
Lecturers: Feres, Gillman, Kirkegaard, Kulkhen, Meltzer, Murico, Stewart

## Offered by the Department

Major in religious studies with the B.A. degree in liberal arts and sciences
Minor in religious studies.

## 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 four-year 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, Asian Studies 458. (3 units)

Area B, Traditions: Religious Studies 320, 325, 328, 330, 335, 337, 338, 339, 340, 342, 345, 351 [or Africana Studies 351], 470 [or American Indian Studies 470], 507 [or History 507], History 538*, Philosophy 351, 353, 401A, 565*. (9 units)

Area C, Theories and Methods: Religious Studies 350, 353, 354, 355, 395, Anthropology 424*, Philosophy 535*, Sociology 338*. (3 units)

Area D, Critical Issues in Religion: Religious Studies 341, 356, 358, 363, 364, 370, 376, 379, 380, 390A, 390B, Political Science 562*, Women's Studies 515* (6 units)

Courses with variable content (496,580, 581, 582, 583, 596) may be used in the four areas of study when deemed relevant by the department adviser.

[^15]
## 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.

## Courses (rels)

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 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 <br> (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 and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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. Sacred Texts of Yoga (A) (3)

Prerequisite: Three units of religious studies.
Primary texts from sacred literatures of Hinduism, Buddhism, Jainism that relate to yoga. Yoga as an independent contemplative tradition with analysis of mind and various techniques of meditation. Methods of interpretation, issues of translation, social and historical contexts.

## REL S 320. Judaism (B) (3) [GE]

Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 335. Comparative Mysticism (B) (3)

Prerequisite: Three units of religious studies.
Meaning, origin, and development of mysticism. Purgation, illumination, annihilation, separation, covenant, and union of soul with the Divine as found in world scriptures, writings of prominent mystics, and mystical movements such as Kabbalists, Sufis, and yogic traditions.

REL S 337. Asian Religions in America (B) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 340. Daoism and Chinese Religions (B) (3)

Prerequisite: Three units of religious studies.
Daoist tradition in context of Chinese popular religions. Early Daoist communities, texts, practices covered. Themes include body and cosmos, magical medicine, immortality practice, ritual, and relationship between classical and popular religious traditions.

## REL S 341. Zen and the Way of Japanese Religions (D) (3) [GE]

Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Historical analysis of major components of classical, medieval, early modern and modern religious systems of Japan through texts, images, rituals, and institutions.

## REL S 342. Hinduism (B) (3)

Prerequisite: Three units of religious studies.
Historical development of Hinduism from its Harappan and Vedic origins to contemporary times. Hindu myths and rituals, gods and goddesses, art, architecture and sacred geographies; Hindu philosophies and ascetic traditions, yogas and tantras; modern Hinduism, diaspora Hinduism and Indian nationalism.

## REL S 345. Religions of East Asia (B) (3) [GE]

Prerequisite: Three units of religious studies. Recommended: Completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

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. Varieties of Religious Experience (C) (3) [GE]

Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors

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)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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 353. Religion and Psychology (C) (3) [GE]
Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

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 354. Religion, Myth, and Storytelling (C) (3) [GE]

Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Introduces, analyzes, and examines issues and themes in the narrative traditions of the world's religions.

## REL S 355. Religious Ritual and Practice (C) (3) [GE]

Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Introduces, analyzes, and examines issues and themes in the ritual traditions of the world's religions.

## REL S 356. Hip Hop and Religion (D) (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Study of the intersection between the global hip hop movement and religious traditions from across the world.

## REL S 358. Death, Dying, and Afterlife (D) (3) [GE]

Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

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.

## REL S 363. Religion and the Sciences (D) (3) [GE]

Prerequisites: Three units of religious studies and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

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 and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

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 and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

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 and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

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 and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

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 and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

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 and completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

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 390A-390B. Religion and American Institutions (D) (3-3) [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 and completion of the General Education requirement in Foundations of Learning II. C., Humanities for nonmajors.

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 C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition 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 470. American Indian Spirituality and Epistemologies (B) (3) [GE] <br> (Same course as American Indian Studies 470)

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities.

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 580. Major Figure (A) (B) (C) (D) (3)

Prerequisite: Three units of religious studies.
Life, works, and significance of one major figure in a religious tradition. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

## 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 582. Major Text (A) (B) (C) (D) (1-3)

Prerequisites: Three units of religious studies and upper division or graduate standing.

Advanced systematic study of a selected scripture or classic text(s) selected from one of the 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 <br> In the College of Arts and Letters 

## OFFICE: Storm Hall 141 <br> TELEPHONE: 619-594-6515 / FAX: 619-594-6530

## Faculty

Emeritus: Hindman, Johns, Miller, Robinett, Sweedler-Brown Chair: McClish
Professors: Bordelon, McClish, Ornatowski, Poole
Associate Professors: Bekins, Boyd, Quandahl, Valentine, Werry Assistant Professor: Minifee
Lecturers: Annicchairico, Barhoum, Boeck, Borgen, Brown, Brush, Bryson, Cavender, Copeland, Costello, Dill, Fielden, Fimbres, Fish, Goodman, Groza, Hoffman, Holslin, Hughes, Kelley, Kinkade, Kline, Linfor, Madden, Manley, Merriam, Morgan, Nerhan, Owens, Parker, Renner, Sager, Sheppard, Sherman, Sigmon, Slater, Tempelton, Tomlin, Towner, Underwood, Vanderpot, 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.

Developmental Writing Program: Developmental writing courses in this program prepare students to satisfy SDSU's competency requirements in written English. For more information, refer to "Writing Requirements" in the "Graduation Requirements" section of this catalog.

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 expository writing ("W") courses which 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 12 units selected from Rhetoric and Writing Studies 411, 500 W or $503 \mathrm{~W}, 510$, and 498 or 506 . The remaining 18 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 writing-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 elective units are to be selected from Rhetoric and Writing Studies $501,503 \mathrm{~W}, 504,505,506,507,508 \mathrm{~W}, 509,512$, or the remaining core course not completed above; Communication 441*, 446*, 450*, 470*, 482*, 492*, 508*, Education 451, Linguistics 430*, 530*, 550*.

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.

## * Additional prerequisites required.

## 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 $B$ 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.

Required courses: (9 units)
RWS 503W Professional Writing (3)
RWS 504 Advanced Professional Writing (3)
RWS $505 \quad$ Writing Project Management (3)
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)
Other electives 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

 (Non-Baccalaureate Credit)Beginning with the class of 2012, the California State University (CSU) has enacted a systemwide mandatory Early Start Program for entering resident CSU freshmen who need remediation in English. Students attending another CSU campus may enroll in the Early Start Program at SDSU. The following course is being offered for service students needing remediation who are enrolling in another CSU campus in the fall semester.

## ESE 96. Developmental Writing Skills (1) Cr/NC

Prerequisite: A score of 146 and below on the EPT.
Introduction to academic writing, emphasizing purpose, structure, and style of academic essays. Designed to improve student ability to write effective college level prose by developing skills in planning, drafting, and editing essays. Meets CSU Early Start Program requirement for CSU students (not continuing at SDSU).

## LOWER DIVISION COURSES <br> (Non-Baccalaureate Credit)

NOTE: Rhetoric and writing studies courses numbered below 100 may not be used to satisfy graduation requirements.

## RWS 92. Developmental Writing: Fundamentals of

 Writing (3) Cr/NCPrerequisite: A score of 146 and below on the EPT.
Academic prose, emphasizing purpose, structure, and style of academic essays. Designed to improve student skills in planning, drafting, revising, editing essays. Open to students who have scored between 142-146 on the EPT and who have not satisfied the SDSU lower division writing competency requirement. Students earning a grade of "Cr" satisfy the SDSU writing competency requirement. Not open to students with credit in Rhetoric and Writing Studies 97. (Formerly numbered Rhetoric and Writing Studies 92A.)

## RWS 94. Developmental Writing for International or Bilingual Students (3) Cr/NC <br> (Same course as Linguistics 94) <br> Prerequisites: A score of 146 and below on the EPT, and nonnative

 English speakers.Intermediate written English with emphasis on problems of nonnative speakers; discussion of sentence, paragraph, and essay writing skills. Open only to ESL students who have not satisfied the SDSU Writing Competency requirement. Students earning a grade of "Cr" satisfy the SDSU writing competency requirement. Students receiving a "NC" should re-enroll in Rhetoric and Writing Studies 94 or Linguistics 94 .

## RWS 98. Mini-Course: Selected Topics (1) Cr/NC

Assorted short courses which will meet three hours a week for five weeks and will cover a variety of academic skills through intensive lectures and laboratory work. Evaluation based on student writing portfolio.

Suggested topics: Research paper, communication skills, research tools, vocabulary development, learning skills, spelling, grammar, and speed reading. See Class Schedule for specific content. Credit earned in courses from this series is not applicable to a bachelor's degree.
A. Learning Skills
C. Tutorial

## LOWER DIVISION COURSES <br> (Acceptable for Baccalaureate Credit)

## RWS 100. Rhetoric of Written Argument (3) [GE]

(Same course as English 100)
International students are advised to take Linguistics 100.
Prerequisite: Satisfaction of the SDSU writing competency requirement. (See Graduation Requirements section of catalog.) If the EPT is used to satisfy the SDSU writing competency requirement, the required minimum score is 151. Students who score between 147-150 on the EPT enroll in Rhetoric and Writing Studies 101. Proof of completion of prerequisite required: Copy of EPT or competency scores or verification of exemption; proof of credit (Cr) in Rhetoric and Writing Studies 92.

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 Rhetoric and Writing Studies 101 or Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or English 100 or Linguistics 100.

## RWS 101. Rhetoric of Written Argument (3) [GE]

Prerequisite: A score of 147-150 on the EPT. Only for students who have passed the EPT.

Follows the prescribed curriculum in Rhetoric and Writing Studies 100. In addition, students are required to attend eight individual tutoring sessions throughout the semester. Students must be concurrently enrolled in Rhetoric and Writing Studies 103. Not open to students with credit in a higher-numbered composition course or Rhetoric and Writing Studies 100 or Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or English 100 or Linguistics 100.

## RWS 102. Critical Reading (1)

(Same course as English 102)
Two hours of activity.
Prerequisites: Students who have met lower division writing competency through completion of Rhetoric and Writing Studies 92; and concurrent registration in Rhetoric and Writing Studies 100.

For freshmen only. Cognitive and critical reading skills essential to academic writing at the university level.

## RWS 103. Tutorial Support (1)

Prerequisite: A score of 147-150 on the EPT.
Tutorial support for Rhetoric and Writing Studies 101.

## 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 writing competency requirement and Rhetoric and Writing Studies 100 or 101 or Africana Studies 120 or American Indian Studies 120 or Chicana and Chicano Studies 111B or English 100 or Linguistics 100. 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, 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 250. Rhetoric in Everyday Life (3) [GE]
Prerequisites: Rhetoric and Writing Studies 100; and Rhetoric and Writing Studies 200 or Journalism and Media Studies 210.

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) <br> (Same course as Linguistics 253)

Prerequisite: Passage of EPT.
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 IVC)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 7 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 and satisfaction of the SDSU writing competency 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 <br> (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 C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition 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 411. Digital Rhetorics (3)

Prerequisite: Completion of the General Education requirements in Composition 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. (Formerly numbered Rhetoric and Writing Studies 511.)
RWS 412. Issues in Gender and Rhetoric (3)
Prerequisite: Completion of the General Education requirements in Composition 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 Composition and Critical Thinking.

Rhetorical analysis of visual texts in their social, cultural, and political contexts.
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 <br> (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 C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition 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: Rhetoric and Writing Studies 305W or 500W.
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)

Prerequisite: Rhetoric and Writing Studies 305W or 500W.
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 503W. Recommended: Graphics or drawing course.

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 505. Writing Project Management (3)
Prerequisite: Rhetoric and Writing Studies 504.
Managing technical documentation projects. Collaborative writing. Managing writing teams. Conducting task analysis, estimating cost and schedule, preparing document plans, gathering information, testing documents, and managing project documentation.

## RWS 506. Writing Internship (3) Cr/NC

Prerequisites: Rhetoric and Writing Studies 504 and Rhetoric and Writing Studies 503W or 508W.

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) <br> Prerequisite: Rhetoric and Writing Studies 503W.

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 C or higher in RWS 280, 281, or LING 281 if score on WPA was 7 or lower); and completed General Education requirements in Composition and Critical Thinking. Proof of completion of prerequisites required: Test scores or verification of exemption; copy of transcript.

Scientific writing in academic and research settings to include clear and concise writing style, rhetorical strategies, and writing of research reports, proposals, conference presentations, and articles. (Formerly numbered Rhetoric and Writing Studies 508.)

## RWS 509. Teaching Composition in Secondary Schools (3)

Prerequisite: Consent of instructor based on writing sample and/ or test.

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 Tutor Theory and Practice (3)

Prerequisite: Satisfaction of Graduation Writing Assessment Requirement.

Theory, practice, and methods of tutoring written composition in post-secondary settings, to include various approaches to one-on-one student conferencing and responding to student writing. Maximum credit six units.

## 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
http://www-rohan.sdsu.edu/~russian

## Faculty

Emeritus: Dukas, Fetzer
Chair: Donadey
Professor: Shapovalov
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, 200B (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 $301,303,305 \mathrm{~A}, 305 \mathrm{~B}, 430,501$; 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 190. Conversation Practice 1 (2)
Prerequisite: Russian 100B.
Conversation skills through active participation in discussions, debates, and oral presentations.

## 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. (Formerly numbered Russian 201.)

## 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.

## RUSSN 290. Conversation Practice 2 (2)

Prerequisite: Russian 190.
Expands active vocabulary and refines communication skills. Russian is practiced in discussions, dialogues, paired activities, and whole-class activities.

## 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]

Prerequisites: Russian 200B; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors. Proof of completion of prerequisites 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]Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors

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; completion of the General Education requirement in Foundations of Learning II.C, Humanities required for nonmajors. Proof of completion of prerequisites 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]Prerequisites: Upper division standing for majors; completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 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.

## Science

## OFFICE: College of Sciences Dean's Office <br> Geology/Mathematics/Computer Science 604

## TELEPHONE: 619-594-5142

## FAX: 619-594-6381

## 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 200. Introduction to Campus Activities and

 Networking (1) Cr/NCProvides 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 partic pate in workshops. Maximum credit two units. (Formerly numbered Psychology 250.)

## SCI 250. Informal Learning and Instruction of Mathematics and

 Science (3) [GE]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 COURSE

 (Intended for Undergraduates)
## 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 COURSE

## (Also Acceptable for Advanced Degrees)

## 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: Arts and Letters 588 <br> TELEPHONE: 619-594-5304

## Offered by Social Science

Major in social science with the B.A. degree in liberal arts and sciences.

```
        Emphasis in Islamic and Arabic studies.
```

Teaching major in social science for the single subject teaching credential.

## The Major

Social science is a multidisciplinary program, encompassing the faculties and courses of 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. The major aims are to promote an appreciation for the interrelatedness of these disciplines by exposing students to their varied methodologies. This program, therefore, is especially appropriate for students who wish to be liberally educated in a broad spectrum of understandings, insights, and appreciations. Students may devise their own focus or select the emphasis in Islamic and Arabic studies.

The social science major is appropriate for many beginning positions in government and, when supplemented with a business administration minor, for careers in business. For students who continue in graduate study after receiving their bachelor's degrees, it is an excellent preparation for graduate and professional programs in law, social work, public administration, librarianship, counseling, business, and the ministry. Students who complete the Single Subject Teaching Credential in Social Science are prepared to teach world history, United States history, geography, government, and economics in high school.

The social science major with an emphasis in Islamic and Arabic studies is a multidisciplinary program which 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.

The social science major in preparation for the single subject teaching credential may be used by students in dual language and English learner education or teacher education or as an undergraduate major for the B.A. degree in Liberal Arts and Sciences. With regard to teacher education, the major provides academic preparation for a career teaching history and the social sciences in California public schools. Courses match the junior high coverage of world history from the middle ages to recent times and of early American history, ninth grade subjects such as ancient religions and global cultures, later high school electives in politics and economics, and core high school classes on modern world history and modern US history. In addition to taking the lower and upper division courses on these topics, you may choose upper division courses in the major according to your own interests. Possible choices range from third world politics to Italian renaissance history to aspects of the experience of African-Americans, American Indians, or Chicanas and Chicanos in contemporary California.

Completion of the social science major provides excellent academic training for your teaching career. It also prepares you to take the State of California examination for history and social science teachers, the social science single subject CSET.

In addition to demonstrating subject matter competence by completing the major, and passing the CSET, you will have to meet other specific requirements in order to teach history and the social sciences in California public schools. Requirements for entry into any

## Social Science Major and Social Science Single Subject Credential Faculty Adviser: Dr. Carole Putko Office: Arts and Letters 580 Telephone: 619-594-5304

California fifth year program in teacher education are detailed in this catalog under Dual Language and English Learner Education and Teacher Education.

You are encouraged to see the social science adviser as soon as possible for further orientation. Upon declaring the major you will need to see the social science adviser each semester.

## 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 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.

## 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, 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, 440, 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.
Master Plan. A master plan of courses taken to fulfill the major must be approved by the social science faculty adviser and filed with the Office of Advising and Evaluations at least one semester prior to graduation.

## Emphasis in Islamic and Arabic Studies (SIMS Code: 116706)

The adviser for this emphasis is Dr. Hisham S. Foad, Department of Economics.

Impacted Program. The Islamic and Arabic studies emphasis is an impacted program. To be admitted to the Islamic and Arabic studies 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).

Preparation for the Major. (18 units)

1. Language: Arabic 101, 102, 201 (12 units) or Persian 101, 102, 201 (12 units).
2. Six units selected from History 100, 101, Religious Studies 101.

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. Students who specialize in Islamic studies must take Religious Studies 310, 328, History 473, 474, and Women's Studies 560 (15 units), and an additional 15 units from Arabic 301, 302, 330, 350, History 574, Political Science 363, Religious Studies 330, 379, and Women's Studies 331. Students who specialize in Arabic studies must take Arabic 301, 302, 330, Political Science 363 (14 units), and an additional 16 units from Arabic 350, History 473, 474, 574, Religious Studies 310, 328, 330, 379, Women's Studies 331 and 560.

Up to six units, with appropriate content, can be applied to either area of specialization from Arabic, History, Political Science, Religious Studies 496, 499, and 596.

## Social Science Major

## In preparation for the Single Subject Teaching Credential With the B.A. Degree in Liberal Arts and Sciences <br> (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 or higher: 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 higher.

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 $C$ or higher.

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, 347A, 347B, 348, 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, 440, 480, Asian Studies 310, 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, 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, 478, 479.

Economics: Three units selected from Economics 330, 338, 349, 382, 458, 490.

* Specified section.


## Social Work

## In the College of Health and Human Services

## OFFICE: Hepner Hall 119 <br> TELEPHONE: 619-594-6865

## Accredited by the Council on Social Work Education.

## Faculty

Emeritus: Ajemian, Baily, Butler, Carrilio, Davis, Dean, DeGennaro, Griffin, Guidry, Harbert, Harris, Haworth, Hughes, Ishikawa, Kahn, Kelley, Landsverk, Raymer, Reilly, Sardinas, Shillington, Siman, Stanford, Sucato, Valle, Zuniga
Director: Hohman
Associate Director: Min
Professors: Engstrom, Hohman, Jones, Mathiesen, Packard, Woodruff
Associate Professors: Finnegan, Ko, Min, Rasmussen, Reed, Zuniga
Assistant Professors: Li, Ogbonnaya, Villagrana
Lecturers: Archuletta, Elson, Robinson, 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 decisionmaking; 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.

## 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 or higher: 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 (Cr/NC);
b. Complete a minimum of 60 transferable semester units;
c. Have a cumulative GPA of 2.50 or higher;
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 higher, 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 or higher. 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 an 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 and community service activity in the U.S. 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;
5. General Studies 450;
6. Health and Human Services 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 300-level 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 (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 higher, 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 330, 431, 531, or 543.

## 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. Students must purchase a revised handbook at the beginning of fall semester as long as they are enrolled in a social work program at SDSU. 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) <br> 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 <br> (Intended for Undergraduates)

## SWORK 350. Cultural Pluralism (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors

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 Socia

 Environment (3) [GE]Prerequisite: Completion of General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required or nonmajors

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 socia 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 (3-9, 3-9) Cr/NC

Prerequisites: Completion of all 300-level social work courses Social Work 381 and 382 with a grade of C 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 COURSE (Also Acceptable for Advanced Degrees)

## 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
http://rohan.sdsu.edu/~sdsusoci

## Faculty

Emeritus: Bloomberg, Buck, Chandler, Cottrell, El-Assal, Emerick, Gay, Gillette, Hohm, Hough, Ima, Kolody, Preston, Sandlin, Scheck, Schulze, Stephenson, Werner, Winslow

## Chair: Ojeda

Professors: Johnston, Liu, Ojeda, Zhang
Associate Professors: Choi, Esbenshade, Marcelli, McCall, Roberts
Assistant Professor: Kim

## 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 largescale social institutions which constitute societies and world systems; the shared cultural beliefs which hold societies together and make life meaningful; the cleavages of race, class, gender, and ethnicity 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 interpersona 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, teaching, law, and public health, 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 or higher: 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 (Cr/NC);
b. Have a cumulative GPA of 2.50 or higher.

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 <br> (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 $C$ or higher.

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 410 or 412
Sociology 430 or 433

## 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, 410, 412, 430, or 433; 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 201. Elementary Social Statistics (3) [GE]

Prerequisite: Course in intermediate algebra. Satisfaction of the Entry Level Mathematics requirement.

Basic statistical techniques in sociology. Tables and graphs, measures of central tendency and variability, correlations, crossclassification, 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; Political Science 201; Psychology 280; Statistics 119, 250.

## SOC 210. Culture and History of Surfing (3)

Surfing from Hawaiian origins to present with attention to cultural differences between Polynesian and Western societies. Relationships between subcultures of surfing and American popular culture. Sociological analysis of surfing in globalized society.

## 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. (Formerly numbered Sociology 250.)

## SOC 310. Love, Jealousy, and Envy: The Sociology of Emotions (3) <br> Prerequisite: Sociology 101.

Sociological understanding of human emotions developed through consideration of history of sex and love, social psychology of jealousy, and political implications of envy. Understanding and management of emotions analyzed in context of community and society.

## SOC 320. Sex and Gender in Contemporary Society (3) [GE]

Prerequisites: Sociology 101 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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 335. Mass Communication and Popular Culture (3) [GE]
Prerequisites: Sociology 101 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

Development of popular culture as influenced by the growth of mass media of communication, including popular music, television, film, newspapers, and advertising. The power, functions, and effects of the mass media in society and in social change.

## SOC 338. Sociology of Religion (3) [GE]

Prerequisites: Sociology 101 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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]

Prerequisites: Sociology 201 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors

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. Contemporary Social Problems (3) [GE]

Prerequisites: Sociology 101 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

Contemporary social problems in North America and other areas of the world.

## SOC 355. Minority Group Relations (3) [GE]

Prerequisites: Sociology 101 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

Historical and comparative analysis of race and ethnic relations. Origins and maintenance of ethnic stratification systems; discrimination and prejudice; the adaptation of minority communities; role of social movements and government policies in promoting civil rights and social change.

## SOC 401. Classical Social Theory (3)

Prerequisite: Sociology 101.
Theories of society; classical European and contemporary US theories of modernity and post modernity, and non-Western theories of cultural and economic hegemony. Evolution of modern world system. Practical understanding of sociological tradition.

## SOC 403. Contemporary Sociological Theory (3)

Prerequisite: Sociology 101.
History and intellectual development of contemporary sociological theories.

## 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 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]

Prerequisites: Sociology 101 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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 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.
Current research on contemporary sexual attitudes and behaviors, including changing norms in premarital, marital, and extramarital relationships. Controversies and implications for the individual and society.

## SOC 421. American Families (3) [GE]

Prerequisites: Sociology 101 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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]

Prerequisites: Sociology 101 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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 IIIness (3)

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) <br> 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 450. Social Change (3) [GE]

Prerequisites: Sociology 101 and completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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 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 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 531. Working and Society (3)

Prerequisite: Sociology 101
Structure and change in labor force, nationally and internationally. Social drama of work: self, roles, conflict, subcultures. Includes exploration of student work experiences, workers in the community, literacy, and film depictions of work worlds.

## 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 <br> TELEPHONE: 619-594-6588 / FAX: 619-594-5293

## Faculty

Emeritus: Barrera, Case, Castro (Castillo), Christensen, Hidalgo, Jiménez-Vera, Kish, Lemus, O'Brien, Robinson, Segade, Talamantes, Wilson, Young
Chair: Blanco
Professors: Blanco, Godoy Marquet, Martin, Martín-Flores
Associate Professors: Ewald, Urzua Beltran
Assistant Professor: Vasconcelos

## Offered by the Department of <br> 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 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 Spanishspeaking 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 or higher: Spanish 202 and 212 (or 282). These courses cannot be taken for credit/no credit (Cr/ 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, or Advanced Placement credit for Spanish 405A and 405B will satisfy this requirement;
b. Have a cumulative GPA of 2.50 or higher.

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 or higher and cannot be taken for credit/no credit (Cr/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, 448, 504; 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 courses.

* Spanish 381 or 382 replaces Spanish 301 and 302 for Spanish speakers.
+ Four electives 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 or higher and cannot be taken for credit/ no credit (Cr/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 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 satisty 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.

## 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 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 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.

Upon completing 15 units of coursework, the student must take a departmental examination for the certificate. Upon successful completion of the examination, the student will be awarded the certificate. 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 <br> 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).
3. Students scoring a 3, 4, or 5 on the Spanish Literature Advanced Placement Examination will receive 6 units of academic credit for Spanish 405A and 405B. The continuation placement level with these scores is Spanish 301 or 381. Credit will not be awarded for lower division Spanish courses.

* AP credit automatically clears the language requirement.


## 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 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.
No credit will be given for lower division 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 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; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Literary analysis of narrative, poetry, and theatre of Spanishspeaking world through study of rhetorical devices.

## SPAN 401. Spanish Prose and Poetics (3)

Prerequisites: Spanish 301 and 302, or Spanish 381 or 382, and 395; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Spanish writers and works in a variety of literary genres.
SPAN 402. Spanish American Prose and Poetics (3)
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382, and 395; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Spanish American writers and works in a variety of literary genres.
SPAN 405A-405B. Survey Course in Spanish Literature (3-3) [GE]
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Important movements, authors and works in Spanish literature from the Middle Ages to the present.
SPAN 406A-406B. Survey of Spanish American Literature (3-3) [GE]
Prerequisites: Spanish 301 and 302, or Spanish 381 or 382; and completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Reading from representative Spanish American authors during colonial, revolutionary, and modern periods.

## 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. (Formerly numbered Spanish 497.)

## SPAN 448. Spanish Linguistics (3)

Prerequisite: Spanish 350.
Structural, historical, and applied Spanish linguistics.

## 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 495. Internship in Translation and Interpretation (3)

Prerequisites: Spanish 491 and consent of instructor.
Students selectively assigned to legal firms, medical facilities, commercial establishments or public offices that deal routinely with English and Spanish translation and interpretation. Students work 15 hours weekly under joint supervision of site coordinators and instructor. Maximum credit six units.

## SPAN 496. Selected Studies in Spanish (3)

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 <br> (Also Acceptable for Advanced Degrees)

## SPAN 501. Genre Studies in Spanish Literature (3)

Prerequisites: Spanish 405A-405B.
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 406A-406B.
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)

Prerequisite: Spanish 405A.
A close reading of Cervantes' novel Don Quixote, Parts I and II.
SPAN 515. Mexican Literature (3)
Prerequisites: Spanish 406A-406B.
Mexican literature from the Romantic period to the present. Special emphasis placed on contemporary era.

[^16]
## 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)

Prerequisite: Spanish 302 or 381 or 382.
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

## http://sdsu.edu/education/sped

Accredited by the California Commission on Teacher Credentialing.

## Faculty

Emeritus: Brady, Cegelka, Doorlag, Forbing, Johnson, Kitano, Lewis, Lynch, McClard
Chair: Hall
Professors: Graves, Hall
Associate Professors: Brandon, Kraemer, McIntosh, Qian

## 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).
Certificate in early childhood special education 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 (2)
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. Meets requirements for preliminary multiple and single subject 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) Cr/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 emotional disturbance. Classroom interventions and procedures
SPED 510. Adapting Communication Systems for Students with Severe Disabilities (1)
Prerequisite: Admission to credential program.
Adaptations of communications and communication systems for students with disabilities. Educational strategies that special education teachers can use to augment classroom communications. Alternative approaches to communication for students with moderate/severe disabilities.

## SPED 524. Characteristics of Students with Mild/Moderate Disabilities (3) <br> 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)Prerequisite: Admission to credential program.
Historical and philosophical perspectives, 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 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 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 <br> In the College of Health and Human Services 

## OFFICE: Speech, Language, and Hearing 221 <br> TELEPHONE: 619-594-7746 / FAX: 619-594-7109

Accredited in speech-language pathology and audiology by the Council on Academic Accreditation in Audiology and SpeechLanguage Pathology.

## Faculty

Emeritus: Allen, Cheng, Christensen, Davies, Gutierrez-Clellen, Nichols, Riedman, Seitz, Thal, Thile, Williams, Wulfeck
Director: Shapiro
Professors: Barlow, Emmorey, Kramer, Love-Geffen, Mackersie, Newhoff, Shapiro
Associate Professors: Dreisbach Hawe, Nip, Pruitt-Lord, Torre, III Assistant Professors: Blumenfeld, Mills
Lecturers: Branch, Dorricott, Georgeson, Lopes, Schmitz, Turner

## 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 graduate and professional study in speech, language, and hearing sciences. 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, audiology, teaching American Sign Language (ASL) as a second language, ASL linguistics, and ASL interpreting. A research doctorate (Ph.D.) is required for individuals wishing 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 genetically, physically, or psychologically caused 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, hearing, and deaf-blind disorders. 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.

## 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 101, 106, 150; Biology 100; Psychology 101 and 260; Psychology 280 (Sociology 201, Statistics 119 or 250 can be substituted for Psychology 280). (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 an 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 and community service activity in the U.S. 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;
5. General Studies 450;
6. Health and Human Services 350.

Major. Speech, Language, and Hearing Sciences 300, 305, 320, 321, 340, 340L, 512, 513, 514, 539, and 580. (33 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 <br> Language, Speech, and Hearing <br> (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 SpeechLanguage 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, 929, 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-Sp) 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 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.

## 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 101. American Sign Language I (4) [GE]

American Sign Language structure, use, literature, and deaf culture. Introductory level communication competence in ASL.
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 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 <br> (Intended for Undergraduates)

SLHS 300. Introduction to Language Science (3)
Structure, acquisition, processing, and neurological organization of language in typical and disordered communication.

## SLHS 305. Hearing Science (3)

Prerequisite: Credit or concurrent registration in Speech, Language, and Hearing Sciences 106.

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.
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.
Prerequisite: Credit or concurrent registration in Speech, Language, and Hearing Sciences 106. Recommended: Psychology 260.

Anatomy and physiology of respiratory, phonatory, and articulatory systems related to speech.

## SLHS 340. Principles of Audiology (3)

Prerequisites: Speech, Language, and Hearing Sciences 305 with a grade of $C$ (2.0) or better and concurrent registration in Speech, Language, and Hearing Sciences 340L. Proof of completion of prerequisites 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 340L. Techniques of Audiometry (1) <br> Three hours of laboratory.

Prerequisite: Credit or concurrent registration in Speech, Language, and Hearing Sciences 340.

Laboratory experience with pure-tone, speech, and immittance audiometric tests.

## 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 503. Advanced Speech Physiology (3)

Prerequisites: Speech, Language, and Hearing Sciences 320 and 321.

Methodology used to evaluate speech physiology in normal and disordered populations. Discussion of characteristics and etiologies of various speech disorders.

## 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 320,
321, and credit or concurrent registration in Speech, Language, and Hearing Sciences 300.

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) Cr/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)Three hours of laboratory screening per week.
Prerequisites: Speech, Language, and Hearing Sciences 150, 300, 305, and 321.

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 $\mathrm{B}+$ 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 approval of school chair.
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 speechlanguage 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.


# Statistics 

## In the College of Sciences

## OFFICE: Geology/Mathematics/Computer Science 413 TELEPHONE: 619-594-6191

## Faculty

Emeritus: Burdick, Macky, Park, Romano
Chair: O'Sullivan
Coordinator for Statistics: Lui
Professors: Fan, Levine, Lui
Associate Professors: Bailey, Chen, Lin
Assistant Professor: Duncan
Lecturers: Manchester, Noble

## 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 statistical computing
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 statistical computing 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 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.

## 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. (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, 510, 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 Office of Advising and Evaluations.

## 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 financia 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. (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, 496, 510, 560, 596; six units selected from Finance 421, 427, or an appropriate course selected with the approval of the undergraduate advise 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 Office of Advising and Evaluations.

## Emphasis in Statistical Computing (SIMS Code: 776373)

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. (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 Statistics 325, 350A, 510, 551A, 551B, 580; Mathematics 541, Computer Science 310, 320; six units selected (with the approval of the undergraduate adviser in statistics) from Computer Science 503, 514, 520, $550,553,558,559,560$; 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 Office of Advising and Evaluations.

## 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 510 , 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, 510, 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

NOTE: Proof of completion of Entry-Level Mathematics requirement required for Statistics 119 and 250: Copy of ELM score or verification of exemption.

## STAT 119. Elementary Statistics for Business (3) [GE]

Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.

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; Political Science 201; Psychology 280; Sociology 201.

## STAT 119A. Recitation for Elementary Business Statistics (1) Cr/NC

Two hours of activity.
Prerequisite: Concurrent registration in Statistics 119.
Additional problem solving, data analyses, statistical concept discussions, and applications.

## STAT 250. Statistical Principles and Practices (3) [GE]

Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.

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; 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 <br> (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 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 <br> (Also Acceptable for Advanced Degrees)

NOTE: Proof of completion of prerequisites required for all upper division courses: Copy of transcript.

## STAT 510. Applied Regression Analysis (3)

Prerequisite: Statistics 350A or comparable course in statistics.
Methods for simple and multiple regression models, model fitting variable selection, diagnostic tools, model validation, and matrix forms for multiple regression. Applications of these methods will be illustrated with SAS, SPSS, and/or R computer software packages.

## 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 <br> TELEPHONE: 619-594-0978 <br> E-MAIL: mlauer@mail.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
Carruthers (Political Science) and Matthew Lauer (Anthropology) Committee: Alcosser (English and Comparative Literature), Atterton (Philosophy), Biggs (Geography), Conway (Anthropology), Elkind (History), Larom (Asian and Pacific Studies), Richardson (Geography), Sasidharan (Recreation and Tourism Management)

## Offered by Sustainability

Major in sustainability with the B.A. degree in liberal arts and sciences.

## 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 Economics 201 or Political Science 201 or Psychology 280 or Sociology 201 or Statistics 119 or 250; three units from Geography 104 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 400 or 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 nine units of which must be 500-level courses.

Field A, Human-Nature Interface: Anthropology 510, Comparative Literature 570, Economics 455, English 305, 491 (with relevant content), History 584, International Security and Conflict Resolution 310, Philosophy 496 (with relevant content), Psychology 310, Religious Studies 376, Women's Studies 540. (3-9 units)

Field B, Applied and Regional Studies: Anthropology 532, Asian Studies 320, Economics 458, Environmental Engineering 320, Geography 340, 354, 426, 440 [or Political Science 440], 554, 572, Latin American Studies 540, Oceanography 320, Political Science 564, Recreation and Tourism Management 305, 470, 487, Sociology 350, Women's Studies 580. (3-9 units)

Field C, Scientific and Analytical Thinking: Biology 324, 327, 538 [or Environmental Science 538], 540, Economics 455, 456, Geography 375, 409, 483, 506, 570, 572, 573, 574, Geological Sciences 305, Public Health 304, 362. (3-9 units)

With the exception of Biology 315 and Geography 370, courses not selected for the core may be used in field distribution A: History 441, Sustainability 332 [or Philosophy 332].

## 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.

## UPPER DIVISION COURSES (Intended for Undergraduates)

## SUSTN 332. Environmental Ethics (3) [GE]

(Same course as Philosophy 332)
Prerequisite: Completion of General Education requirement in Foundations of Learning II.C., Humanities.

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)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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)
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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 400. Sustainability Capstone (3)

Prerequisites: Senior standing and completion of core courses for the major.

Capstone course for sustainability major. Completion of research project based on coursework and study abroad experience; applying knowledge of ecologic, economic, and social interactions to real-world problems.

## 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

## SCHOOL OF TEACHER EDUCATION:

## Education and Business Administration 255

TELEPHONE: 619-594-6131 / FAX: 619-594-7828
http://go.sdsu.edu/education/ste/Default.aspx
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, Alger, Bee, Berg, Botkin, Burnside, Charles, Cornejo, Curry, Duckworth, Elliott, Erickson, Fearn, Garrison, Gast, Gega, Goodson, Hill, Hovda, Ingmanson, Kaatz, Kelly, Kendall, Lapp, Lujan, Mason, McCormack, McCoy, Mehaffy, Mikitka-Gomez, Mora, Moreno, Moss, Murphy, Nagel, A., Nagel, T., Platz, Reel, Retson, Riggs, Rixman, Ross, P., Shaw, Stautland, Strom, Tran, Treadway, Wilding, Zozakiewicz
Director: Bezuk
Professors: Bezuk, Chizhik, A., Danforth, Evans, Farnan, Gallego, Gibson, Lamb, Neumann (IVC), Pang, Park, Philipp
Associate Professors: Branch, Cappello, Chizhik, E., Duesbery, Nieto, Ponce (IVC), Ross, D., Santa Cruz, Vaughn
Assistant Professors: Soto, Sterling Aquino
Lecturers: Littrell, Prime, Telfer

## Offered by the School

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.
Clear program for a professional clear credential
Induction program for a professional clear credential.
Multiple subject preliminary teaching credential.
Reading/language arts specialist credential.
Single subject preliminary teaching credential.
Linked learning certificate (refer to the Graduate Bulletin).
Mathematics specialist certificate (refer to the Graduate Bulletin).
Reading certificate (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 $\mathrm{K}-12$ 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 full-time 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 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 higher.
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 this catalog on "General Regulations."

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 <br> 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 Teachers-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 higher 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." 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." This course is a prerequisite for applicants.
c. Mathematics 210, "Number Systems in Elementary Mathematics." In lieu of Mathematics 210, candidates may substitute any calculus course taken at the college or university with a grade of credit, "C," or higher.
d. Special Education 450, "Classroom Adaptations for Special Populations." This course is a prerequisite for applicants.
Candidates are required to submit unofficial transcripts from SDSU and official transcripts from all other colleges and universities attended including any current coursework-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 units attempted. Candidates are required to submit official transcripts from all colleges and universities attended and unofficial 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 email 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 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. The narrative should address the following items:
a. What skills and life experiences do you have that can contribute to your being an effective teacher in an urban setting?
b. We have all had challenges in a work or academic setting Describe one of these situations and how you responded to it.
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, 619-594-6320. 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

TE 902
TE 910A
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 $960 \quad$ Basic Student Teaching Seminar (Cr/NC) ..................... 2
TE 961 Advanced Student Teaching Seminar (Cr/NC)............. 2
TE 965
Basic Student Teaching in Elementary Schools (Cr/NC) .8
TE 966
Advanced Student Teaching in Elementary Schools ( $\mathrm{Cr} / \mathrm{NC}$ )8

ED 970

Teaching Event Assessment (Cr/NC) ..... 3
DLE 915ATeaching and Learning in the Content Area:English Language Development/SDAIE .................. 3

Total Units $\overline{45}$

## 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 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
English language arts: Comparative Literature, English
Science: Biology, Chemistry, Physical Science
Mathematics: Mathematics
Music: Music (currently accepting applications from SDSU undergraduate majors only)
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 higher.
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, through a combination of coursework and competency examinations, or through California Subject Examinations for Teachers (CSET). Candidates should check with the credential program advisers, 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. Courses are listed in the section of this catalog on "Graduation Requirements," IV. American Institutions Requirement.
6. Current certification in cardiopulmonary resuscitation (CPR).
7. Successful completion of the Performance Assessment for California Teachers (PACT).
8. Knowledge of health education, to include substance abuse and nutrition: Teacher Education 280 - Health Education for Teachers (1 unit) or approved equivalent.
9. Demonstrated knowledge of the needs 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).
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 this catalog on "General Regulations."

## 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 higher 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." 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." 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." 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 email 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. The narrative should address the following items:
a. What skills and life experiences do you have that can contribute to your being an effective teacher in an urban setting?
b. We have all had challenges in a work or academic setting Describe one of these situations and how you responded to it.
10. Appeals Process. Candidates who do not meet all the admission requirements may petition the Single Subject Admissions and Retention Committee for individua 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, 619-594-6320. All candidates are urged to attend one of the regularly scheduled group advising sessions prior to making an individual appointment.

## Single Subject Required Courses

TE 903
Secondary School Student Teaching Seminar (Cr/NC).

Units

TE 914
Teaching and Learning in the Content Area: Major3

TE 922
TE 933
TE 954
Behavioral and Psychological Aspects of Teaching Teaching of Reading in the Secondary School Humanistic and Social Aspects of Teaching3-4

TE 963

Secondary School Student Teaching I
(Cr/NC/RP) ..... 4(Cr/NC/RP)12Teaching and Learning in the Content Area:English Language Development/SDAIE 3

Total Units 37-39

## 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

## Liberal Studies Major

## With the B.A. Degree in Applied Arts and Sciences

## (Major Code: 49015)

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 Division of Undergraduate Studies.

## 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.

Complete online classes available. Field experience in local school setting.

Prerequisite: A valid SB 2042 Preliminary Multiple or Single Subject Credential or equivalent. Clear credential program coursework cannot be taken prior to issuance of the preliminary credential. Optional: Signed CL-855 required to verify employment by contracted teachers before seeking approval to complete field experience in their own classrooms.*

## Courses Required for the Credential (13-16 units)

$\begin{array}{cr}\text { TE 602A } & \text { Seminar: California Clear Teaching } \\ & \text { Credential (Cr/NC) ............................................. } 1\end{array}$
TE 602B Seminar: Formative Assessment ................................. 3
TE 969 Clinical Practice for Induction .................................. 1-4
DLE 651 Curriculum, Teaching, and Assessment: ELD and SDAIE
.. 3
LDT 570 Advanced Teaching with Technologies ....................... 3
SPED 600 Classroom Adaptations for Special Populations ......... 2

* For questions regarding the program, contact the Clear Credential Office, clearcredential@ mail.sdsu.edu. For details or to apply, 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 $\mathbf{9 0 0}$-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 human development using a cultural/ecological framework applied to case studies and direct observations. Open only to liberal studies majors. 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 10 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. (Formerly numbered Teacher Education 211.)

## TE 211B. Field Experience in Science (1) Cr/NC

One lecture and 10 hours of fieldwork.
Prerequisite: Recommended for sophomore or higher level students.

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 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. (Formerly numbered Health and Human Services 280.)

## 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) (Offered only at IVC)
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 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 IVC)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 415. Methods and Materials of Instruction (3)

## (Offered only at IVC)

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 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 512. Ethnic Identity Development in Education (3)

Prerequisite: Consent of instructor.
Racial and ethnic identity development through curriculum for improving academic achievement of students in K-12 schools. Racial and ethnic socialization of children and identity development of American ethnic groups.

## 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.

[^17]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 http://ttf.sdsu.edu

## Accredited by the National Association of Schools of Theatre

## Faculty

Emeritus: Anderson, Annas, Blue, Harvey, A.C., Harvey, M., Heighton, Jones, Larlham, P., Lee, Madsen, Martin, McKerrow, Meador,
O'Donnell, Ofield, 'Real, Reid, Salzer, Stephenson, Witherspoon, Wolf, Wylie
Director: Hopkins
The Don W. Powell Chair in Scene Design: Funicello
Filmmaker in Residence: Ofield
Professors: Durbin, Freeman, Kalustian, Larlham, M., Lauzen, Morong, Powell, Reinholz, Schreiber
Associate Professors: Bedau, Bliznakova, Cirino, Hopkins
Assistant Professors: Alita, Khoo, McMills, Meffe, Slowik
Lecturers: Keith, Oppenheimer, Orr, Sheehan, Underwood, Voytilla

## Offered by the School

Master of Arts degree in theatre arts.
Master of Fine Arts degree in theatre arts.
Master of Arts degree in television, film and new media production.
Major in theatre arts with the B.A. degree in applied arts and sciences Emphasis in design and technology for the theatre. Emphasis in design for television and film.
Emphasis in performance: acting and musical theatre. 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.
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, who retired after 30 years with the theatre department, 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 artists spend time with students and faculty each year. Edward Albee has for many years come to San Diego State University each spring. He is the recipient of many honors including three Pulitzer prizes and is best known for his play Who's Afraid of Virginia Woolf. Marion Ross is a graduate of our program and has had an illustrious career in theatre, television, and film. For many years, she played the mother on the TV series "Happy Days." Both Mr. Albee and Ms. Ross generously share their insights and are examples for our students of the highest professional achievements. Artists and guests have included David McKenna, Ron Najor, Ryan Scott Oliver, Susan-Lori Parks, and Duncan Sheik; with support from film producer Kathleen Kennedy, 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. By example, the school's faculty helps students realize their creative potential as artists, scholars, leaders, and global citizens who celebrate cultural diversity and promote social equality through theoretical explorations and practical experience in theatre, television, and film.

## 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 major. To be admitted to the theatre arts major, students must meet the following criteria:
a. Complete with a grade of C or higher: Theatre $100^{\wedge}, 120,130^{*}$ (or appropriate transfer equivalents). These courses cannot be taken for credit/no credit (Cr/NC);
b. Have a cumulative GPA of 2.40 or higher.
$\wedge$ Theatre 100 is not required for the Emphasis in Performance: Acting and Musical Theatre.

* Theatre 130 is not required for the Emphasis in Design and Technology for the Theatre 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 (Cr/NC).
- General Theatre Arts Program: Television, Film and New Media 160 must be completed with a grade of $C$ or higher.
- Emphasis in Performance: Acting and Musical Theatre: Theatre 111 (or transfer equivalent of this course), and Theatre 332 with a GPA of 3.0 or higher.
- Emphasis in Design and Technology for the Theatre and Emphasis in Design for Television and Film: Theatre 240 (or transfer equivalent of this course) must be completed with a grade of C or higher.
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 or higher 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 for the Theatre <br> (SIMS Code: 662552)

To declare an Emphasis in Design and Technology for the Theatre Arts 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 or higher;
b. Submit 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 or higher 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 37 upper division units in theatre to include Theatre $325,359,440,442 \mathrm{~A}$ or $442 \mathrm{~B}, 446 \mathrm{~A}, 446 \mathrm{~B}, 447,452,460 \mathrm{~A}$, 460B, 530A or 530B; and three units selected from Theatre 540, 547, 548, 552; and four units selected from Theatre 349, 448, 539, 541, 545, 546, 549, 550, 554A, 554B.

## 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 or higher;
b. Submit 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 or higher 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: Acting and Musical Theatre (SIMS Code: 662594)

To declare an Emphasis in Performance: Acting and Musical Theatre, in addition to the criteria for admission to the General Theatre Arts program, students must complete the following:
a. Theatre 111 (or transfer equivalent of this course) and Theatre 332;
b. GPA of 3.0 or higher in the above courses;
c. A written positive review of student's work by the instructor of Theatre 332.
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 $C$ or higher and cannot be taken credit/no credit (Cr/NC). Theatre 111 and 332 must be completed with a GPA of 3.0 or higher.

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; SDSU approved Study Abroad Program offered by other accredited institutions, theatre internship, independent study, or experience offered by the school or university which offers significant intercultural content to the student (a significant experience in a culture other than one's own).

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, 533A. 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 $C$ or higher 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 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 329A, 329B, 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 <br> (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 grade point average of 3.00 or higher;
b. Complete with a grade of B or higher: Theatre 100, 120, Television, Film and New Media 110, 160.
These courses cannot be taken for credit/no credit (Cr/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 B or higher and cannot be taken for credit/ no credit (Cr/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 Journalism and Media Studies 310W, 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, 462; 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, 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 <br> (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 producers, directors, art directors, 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 or higher: Theatre 100 and Television, Film and New Media 160. Complete with a grade of C or higher: Television, Film and New Media 110, Theatre 120, and three units from Art 157, 258, 259, Music 151, or Theatre 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 3.00 or higher;
e. Submit samples of visual creative work;
f. Submit a treatment for a 1-3 minute production (fiction or nonfiction).
Preparation for the Major. Television, Film and New Media 110, 160; Theatre 100, 120; and three units from Art 157, 258, 259, Music 151, or Theatre 130. (15 units) Television, Film and New Media 160 and Theatre 100 must be completed with a grade of B or higher 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 , or Theatre 130 must be completed with a grade of C or higher and cannot be taken for credit/no credit (Cr/NC).

Graduation Writing Assessment Requirement. Passing the Writing Placement Assessment with a score of 10, or Journalism and Media Studies 310W, 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 27 units from Television, Film and New Media 310, 314, 330, 361, 362, 364A or 364B, 510, 540, 560; six to nine units selected from Television, Film and New Media 321, 322, 327, 350, 401, 465, 490, 499, 522, 550, $551,559,561,590$, or Theatre 359; six to nine units selected from Television, Film and New Media 363, 364A or 364B, 430, 462, 470, 530,571 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, 460A or 460B; 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 21 units to include Theatre 100; Television, Film and New Media 110, 160, 310; six units selected from Television, Film and New Media 363, 364A, 364B, 430, 462; and three units selected from Television, Film and New Media 330, 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 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 of 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 13-15 units to include 12 units selected from the following courses:

| THEA 335 | Stage Management-Theory (3) <br> THEA 336 <br> Stage Management-Practicum (3) |
| :---: | :---: |
| THEA 345 470 | Theatre Marketing and Publicity (3) <br> Facility Operations and Management <br> for Theatre (3) |
| THEA 476 476 |  |
| Event Coordination and the Entertainment |  |
| Industry (3) |  |

## Courses (thea \& trm)

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 and minors 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 241. Theatre Production Essentials (1)
(Offered only in the College of Extended Studies)
Theatrical departments and components involved with the creation of live theatre. Course not open to theatre majors.

## 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, imaging, 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 329. Practicum in Theatre for Young Audiences Cr/NC

## (329A: 2 units) (329B: 1 unit)

Two hours of activity per unit.
Prerequisite: Theatre 315.
Practical experience in department public performances of plays
for young audiences.
A. Rehearsal
B. Performance

## THEA 332. Advanced Acting (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. Theatre 241 for non-theatre majors only.
Development of the prompt script, organizational methods, and collaborative personnel interaction. Maximum credit six units. (Formerly numbered Theatre 475A.)
THEA 336. Stage Management-Practicum (3)
Six hours of activity.
Prerequisite: Theatre 240. Theatre 241 for non-theatre majors only.
Practical experience in stage managing department productions. Maximum credit six units. (Formerly numbered Theatre 475B.)

## THEA 345. Theatre Marketing and Publicity (3)

One lecture and four hours of activity.
Prerequisite: Theatre 100. Theatre 241 for non-theatre majors only.
Practical experience in marketing and publicity for theatres, including PSA's, 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 355. Movement for the Theatre I (2)

Two hours of activity per unit.
Prerequisite: By audition for majors. Theatre 111 for theatre minors.
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) <br> 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 Cr/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. (Theatre 446C formerly numbered Theatre 445A; Theatre 446A and
446B formerly numbered Theatre 445B.)
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 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]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

Theatre from primitive 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]

Prerequisites: Theatre 325 for theatre majors. Completion of the General Education requirement in Foundations of Learning II.C., Humanities for nonmajors.

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. Theatre 241 for non-theatre majors only.
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. Theatre 241 for non-theatre majors only.
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) Cr/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 <br> (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 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 545. Mechanical Drawing for the Theatre (2) <br> Four hours of activity.

Prerequisite: Theatre 240 or admission to MFA in Design.
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.
Prerequisites: Theatre 440, 447, 452, or 546.
Application of computer software for theatre, including scenery,
costume, lighting, and sound design. Maximum credit four 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 three hours of activity.
Prerequisites: Theatre 240, 442.
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.
Prerequisite: Theatre 240.
Current materials and practices of costume technology: advanced construction techniques, fabric selection and use, period pattern drafting, draping, and cutting. Maximum credit four units.
THEA 554B. Costume Design Technology II (2)
Four hours of activity.
Prerequisite: Theatre 240.
Advanced costume craft construction techniques and management procedures for costume production: millinery, fabric dyeing and painting, jewelry, and related crafts. Maximum credit four 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 MFA musical theatre program.
Consent of instructor for undergraduates.
Musical theatre movement and dance styles. Maximum credit eight units.
THEA 570. Practicum in Theatrical Production (1-3)
Prerequisite: Theatre 440, 447, or 452; or admission to MFA in Design.

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)

Prerequisite: 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)
Prerequisites: Satisfaction of the English Placement Test. Ability to type. Proof of completion of prerequisites required: Copy of EPT or competency scores or verification of exemption

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 three hours of laboratory.
Prerequisite: Television, Film and New Media 314.
Basic cinematography, including introduction to specialized studio and location equipment; lighting techniques for film and television; introduction to film labs. (Formerly numbered Television, Film and New Media 522.)

## 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]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 401. Business Aspects of Television and Film Production (3) Prerequisite: Television, Film and New Media 361 or 362 or Theatre 241 for non-theatre majors only. 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]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

History, trends, and dynamics in the programming of prime-time network television. External and internal forces that influence what we watch.
TFM 462. Documentary: History and Theory (3) [GE]
Prerequisite: Television, Film and New Media 160 for majors. Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

Persuasive concepts, techniques, and forms in documentary film and television programs. Major historical works and their impact on society.

## TFM 465. Compositing (3)

Two lectures and three hours of activity.
Prerequisite: Television, Film and New Media 361 or 362.
Computer-generated imagery and compositing techniques used in feature films and broadcast 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 (3)

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 <br> (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 three hours of laboratory.
Prerequisite: Television, Film and New Media 314 (or consent of instructor).

Advanced theory and practice of cinematography for film and television production. Lighting for mood and character; camera movement for story telling; and new techniques in film, digital, and HD formats. Careers in the purely visual aspects of film making. (Not the same course as Television, Film and New Media 522 in the 2004-05 catalog and previous SDSU catalogs.)

## 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.
(Formerly numbered Television, Film and New Media 340.)

## 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 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 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.

# Women's Studies 

## In the College of Arts and Letters

## OFFICE: Arts and Letters 346 <br> TELEPHONE: 619-594-6524

## Faculty

Emeritus: Colwill, Espín, Huckle, Jones, Kohen, Scott, Watson, Zimmerman
Chair: Ghosh
Professors: Cayleff, Donadey, Ghosh, Rothblum
Associate Professors: Hua, Lara, Mattingly, Price
Assistant Professor: Giordano

## Offered by the Department

Master of Arts degree in women's studies.
Major in women's studies.
Minor in women's studies.
Certificate in women's studies, basic.
Certificate in women's studies, advanced (refer to the Graduate Bulletin).

## The Major

Women's studies explores who women were, who women are, who they might be, and how their lives and human interactions are affected by society's values, traditions, and institutions. SDSU has offered courses in women's studies since 1969 and has one of the strongest academic programs in the nation. Its origins are in the women's movement, and its vision includes a world free of sexual, racial, age, and class distinctions and other inequalities.

Courses are designed to provide students with a coherent, integrated, and academically rigorous education. Content areas include concepts of self and family, theories of sex differences, history, cultural contributions, and the study of society's institutions. The emphasis is on increasing the awareness of objective conditions in women's lives throughout the world, and on developing critical analytical skills.

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 law, journalism, public administration, social services, personnel, and psychology. 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. Women's Studies 101 and 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 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 $(\mathrm{W})$ 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.

Scholarships are available for the international experience. The internship and the international experience meet the student learning outcomes in the Women's Studies Department.

Major. A minimum of 27 upper division units to include nine 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, 360, 370, 375, 382, 385; Africana Studies 332*, Chicana and Chicano Studies 340A*, Lesbian, Gay, Bisexual, and Transgender Studies 321*, 322*, Political Science 336*, Religious Studies 370*

Group II: Women's Studies 512, 515, 520, 522, 530, 535, 540, 545, $560,565,570,572,580,581,582,596,598^{*}$

* No more than three units may be applied to the major in women's studies.


## Women's Studies Minor (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:

Women's Studies 101, 102, and six units selected from Women's Studies 310, 320, 325, 331, 336, 340, 341A-341B, 352, 360, 370, 375, 382, 385; Africana Studies 332*, Chicana and Chicano Studies 340A*, Lesbian, Gay, Bisexual, and Transgender Studies 321*, 322*, Political Science 336*, Religious Studies 370*.

Six units selected from Women's Studies 512, 515, 520, 522, 530, $535,536,540,545,560,565,570,572,580,581,582,590,596,598 *$.

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.

[^18]
## Women's Studies Certificate

(Offered through the College of Extended Studies)

## (SIMS Code: 119504)

The women's studies 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 the College of Extended Studies. Before being admitted to the program, students must meet with an adviser to map out suitable courses. Applications may be obtained from the College of Extended Studies. 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, 385, 512, 515, 530, 535, 560, 570, 580, 581.

Health Overview: Women's Studies 325, 360, 382, 520, 522, 540, 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://www-rohan.sdsu. edu/-wsweb/faculty.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. Women: Self, Identity and Society (3) [GE]

Interdisciplinary introduction to women's studies thought and scholarship in the social sciences, to include such areas as genderbased language, personality development and self-concept, social evolution, family structures, and economic life.

## 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 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]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

Impact of formal and informal institutions on female development and roles across the life span.

## WMNST 325. Psychology of Women (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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) [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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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 360. Women's Sexuality and the Body (3) [GE]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.C., Humanities required for nonmajors.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

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]

Prerequisite: Completion of the General Education requirement in Foundations of Learning II.A.2. Life Sciences required for nonmajors.

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 385. Women's Work: Invisibility and Empowerment (3) [GE]
Prerequisite: Completion of the General Education requirement in Foundations of Learning II.B., Social and Behavioral Sciences required for nonmajors.

Conditions and factors affecting women's paid and unpaid work. Marriage, divorce, fertility, and childcare; women's occupations, earnings and education; economics of sex discrimination; government economic policies and women's welfare.
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. Sociocultura 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 540. Women and the Environment (3)

Prerequisite: Three upper division units in women's studies.
Women environmental activists and authors including those in diverse communities, settings, and alliances (native American, British colonial, Asian, American environmental movements, urban environmental justice).

## 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 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) Cr/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.

## PART SIX

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 in Rules and Policies

Although every effort has been made to assure the accuracy of the information in this publication, students and others who use this publication 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 this publication 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 publication 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 the student to San Diego State University is one governed by statute, rules, and policy adopted by the legislature, the trustees, the chancellor, the president 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) and regulations adopted thereunder (34 C.F.R 99) set out requirements designed to protect students' privacy in their 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. The law 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. The law generally requires the institution to receive a student's written consent before releasing personally identifiable data about the student. The institution has adopted a set of policies and procedures governing implementation of the statutes 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 types of information included in the campus statement of policies and procedures are: (1) the types of student records maintained and the information they contain; (2) the official responsible for maintaining each type of 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) the procedures for challenging the content of student records; (7) the cost to be charged
for reproducing copies of records; and (8) the right of the student 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

The campus is authorized under the Act to release "directory information" concerning students. The Office of the Registrar releases the following: student's name, major field of study, dates of attendance degrees, honors, and awards received. Although federal law allows for the release of address, telephone listing, e-mail address, photograph, place and date of birth, grade level, enrollment status, previous educational institution attended, and information related to participation in athletics, San Diego State University has a practice of not routinely releasing this information. The above designated information is subject to release by the campus at any time unless the campus has received prior written objection from the student specifying what information the student requests not be released. Students are given an opportunity o 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 educationa 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 may also be disclosed to other persons or organizations under such conditions as part of 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

The Center for Student Rights and Responsibilities, 619-594-3069 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 (http://www.calstate.edu/ EO/EO-1097.pdf) 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.

Race, Color, Ethnicity, National Origin, Age, Genetic Information, Religion, and Veteran Status

The California State University does not discriminate on the basis of race, color, ethnicity, national origin, age, genetic information, religion, or veteran status 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.

## Disability

The California State University does not discriminate on the basis of disability 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 Student Disability Services (SDS), 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.

## Sex/Gender/Gender Identity/

## Gender Expression/Sexual Orientation

The California State University does not discriminate on the basis of sex, gender, gender identity, gender expression, or sexual orientation 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 male and female CSU students in all campus programs, including intercollegiate athletics.

Title IX of the Education Amendments of 1972 protects all people regardless of their gender or gender identity from sex discrimination, which includes sexual harassment and violence:

- Sexual discrimination means an adverse act of sexual discrimination (including sexual harassment, sexual violence, 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 conduct of a sexual nature that includes, but is not limited to, sexual violence, sexual advances, requests for sexual favors, indecent exposure and other verbal, nonverbal or physical unwelcome conduct of a sexual nature, where such 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 individual, and is in fact considered by the individual, as limiting the individual's ability to participate in or benefit from the services, activities or opportunities offered by the university. Sexual harassment includes submission to, or rejection of, where the conduct is explicitly or implicitly used as the basis for any decision affecting an individual's academic status or progress, or access to benefits and services, honors, programs, or activities available at or through the university. Sexual harassment also includes gender-based harassment, which may include acts of verbal, non-verbal or physical aggression, intimidation or hostility based on sex or sex-stereotyping, even if those acts do not involve conduct of a sexual nature.
- Sexual violence is a form of sexual harassment and means physical sexual acts, such as unwelcome sexual touching, sexual assault, sexual battery, rape, domestic violence, dating violence, and stalking (when based on gender or sex) perpetrated against an individual against his or her will and without consent or against an individual who is incapable of giving consent due to that individual's use of drugs or alcohol, status as a minor, or disability. Sexual violence may include 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). Men as well as women can be victims of these forms of sexual violence. Unlawful sexual intercourse with a minor (statutory rape) occurs even if the intercourse is consensual when the victim is under 18 years old, because the victim is considered incapable of giving legal consent due to age.
- Sexual Assault is a form of sexual violence 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 violence and is any willful and unlawful use of force or violence upon the person of another because of that person's gender or sex.
- Rape is a form of sexual violence 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 s/he is 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 accused'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 violence 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.)
- Consent means an informed, affirmative, conscious decision by each participant to engage in mutually agreed-upon sexual activity.
- Consent must be voluntary, and given without coercion, force, threats, or intimidation. Consent requires positive cooperation in a particular sexual act, or expression of intent to engage in that sexual act through the exercise of free will.
- Consent can be withdrawn or revoked. Consent to one form of sexual activity (or one sexual act) does not constitute consent to other forms of sexual activity (or other sexual acts). Consent to sexual activity given on one occasion does not constitute consent to sexual activity on another occasion. The fact that two people are or were in a dating or sexual relationship does not constitute consent to engage in sexual activity. There must always be mutual and affirmative consent to engage in sexual activity. Consent to a sexual act may be withdrawn or revoked at any time, including after penetration. The victim's request for the perpetrator to use a condom or birth control does not, in and of itself, constitute consent. Once consent is withdrawn or revoked, the sexual activity must stop immediately.
- Consent cannot be given by a person who is incapacitated. For example, a person cannot give consent if $s / h e$ is unconscious or coming in and out of consciousness. A person is incapacitated if s/he lacks the physical and/or mental ability to make informed, rational judgments. Examples of incapacitation include unconsciousness, sleep, and blackouts. 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 decisionmaking capacity, awareness of consequences, and ability to make fully informed judgments. A person with a medical or mental disability may also lack the capacity to give consent.
- Being intoxicated by drugs or alcohol does not diminish a person's responsibility to obtain consent from the other party before engaging in sexual activity. Factors to be considered include whether the person knew, or whether a reasonable person in the accused's position should have known, that the victim did not give, or revoked, consent; was incapacitated; or was otherwise incapable of giving consent.
- Sexual intercourse with a minor is never consensual when the victim is under 18 years old, because the victim is considered incapable of giving legal consent due to age.
- Domestic Violence is a form of sexual violence and is abuse committed against someone who is a current or former spouse, current or former cohabitant, someone with whom the abuser has a child, someone with whom the abuser 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. 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 husband and wife, (5) the continuity of the relationship, and (6) the length of the relationship.
- Dating Violence is a form of Sexual Violence and 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.
- Stalking means a repeated course of conduct directed at a specific person that places that person in reasonable fear for his/ her or others' safety, or to suffer substantial emotional distress.
- 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.htm|.


## 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. Your campus Title IX coordinator is available to explain and discuss your right to file a criminal complaint (for example, in cases of sexual violence); the university's complaint process, the investigation process; how confidentiality is handled; available resources, both on and off campus; and 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, irentto@mail.sdsu.edu Administration, Room 320

619-594-6017
SDSU Deputy Title IX Coordinator
Dr. Lee Mintz, Imintz@mail.sdsu.edu Dr. Lee Mintz, Imintz@mail.sdsu.edu
Student Services West, Room 1604
619-594-3069

## SDSU Police Department <br> police@mail.sdsu.edu Department of Public Safety, Room 100 619-594-1991

## U.S. Department of Education, Office for Civil Rights

 800-421-3481 or ocr@ed.govIf you wish to fill out a complaint form online with the OCR, you may do so at:
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 sex discrimination complaints, sexual harassment, and violence, as well as provide training, education, and preventive measures related to sex discrimination. CSU Executive Order 1097 (http://www.calstate.edu/eo/EO-1097. pdf) 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.

Except in the case of a privilege recognized under California law, examples of which include Evidence Code $§ \S 1014$ (psychothera-pist-patient); 1035.8 (sexual assault counselor-victim); and 1037.5 (domestic violence counselor-victim), any member of the university community who knows of or has reason to know of sexual discrimination allegations shall promptly inform the campus Title IX coordinator. (See confidential reporting options outlined below.)

Regardless of whether an alleged victim of sexual discrimination ultimately files a complaint, if the campus knows or has reason to know about possible sexual discrimination, harassment or violence, it must review the matter to determine if an investigation is warranted. The campus must then take appropriate steps to eliminate any sex discrimination/harassment, 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 sexual discrimination, harassment or violence; therefore, victims should not be deterred from reporting incidents of sexual violence 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 violence 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 assault may face criminal prosecution by law enforcement and may incur penalties as a result of civil litigation. In addition, employees and students may face discipline at the university. Employees may face sanctions up to and including dismissal from employment, pursuant to established CSU policies and provisions of applicable collective bargaining unit agreements.

Students who are charged by the university with sexual discrimination, harassment, or violence will be subject to discipline, pursuant to the California State University Student Conduct Procedures (CSU Executive Order 1098 at http://www.calstate.edu/eo/EO-1098.pdf 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 immediate interim suspension from the university, 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 Violence, Dating Violence, Domestic Violence and Stalking

The university encourages victims of sexual violence, dating violence, domestic violence, or stalking (collectively sexual Violence) to talk to someone about what happened - so they can get the support they need, and so the university can respond appropriately. Whether - and the extent to which - a university employee may agree to maintain confidentiality (and not disclose information to the Title IX Coordinator) depends on the employee's position and responsibilities at the university. The following information is intended to make victims aware of the various reporting and confidential disclosure options available to them - so they can make informed choices about where to turn for help. The university strongly encourages victims to talk to someone identified in one or more of these groups.

Certain university employees, listed below, are required by law to maintain near or complete confidentiality; talking to them is sometimes called a "privileged communication." University law enforcement employees may maintain the victim's identity as confidential, if requested by the victim, but will report the facts of the incident to the Title IX Coordinator, including the identity of the perpetrator. Most other university employees are required to report all details of a Sexual Violence incident (including the identities of both the victim and alleged perpetrator) to the Title IX Coordinator so the university can take immediate action to protect the victim, and take steps to correct and eliminate the cause of Sexual Violence.

University Police, the Title IX Coordinator, university-employed physicians, professional counselors, sexual assault and domestic violence counselors and advocates, and certain other university employees are required to explain to victims their rights and options with respect to confidentiality.

## Privileged and Confidential Communications

Physicians, psychotherapists, professional, licensed counselors, and clergy who work or volunteer on or off campus, and who provide medical or mental health treatment or counseling (including those who act in that role under their supervision) may not report any information about an incident of sexual violence 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, 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 (including all individuals who work or volunteer in these centers and offices, as well as non-professional counselors or advocates, and those who act in that role under their supervision) may talk to a victim without revealing any information about the victim and the incident of sexual violence 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 counselor, 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, 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 it 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 Violence, 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, 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 Violence incident. If applicable, these professionals will explain this limited exception to victims.

## Reporting to the Title IX Coordinator and Other University Employees

Most university employees have a duty to report sexual violence incidents when they are on notice of it. When a victim tells the Title IX Coordinator or another university employee about a sexual violence incident, 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 sexual violence 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 counselors, sexual assault counselors and advocates, must report to the Title IX Coordinator all relevant details about any sexual violence incidents 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 violence incident except as otherwise required by law or university policy. A Sexual Violence report 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 violence. 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 his/her identity remain completely confidential, the Title IX Coordinator will explain that the university cannot always honor that request and 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 Executive Order 1095 for further details around confidential reporting, and other related matters (http://www.calstate.edu/EO/ EO-1095.pdf).

## Additional Resources

- SDSU's sexual violence prevention and education statement, which includes facts and myths about sexual violence, at http://oerc.sdsu.edu/Title_IX_Notice.html.
- U.S. Department of Education, regional office:

Office for Civil Rights
50 Beale Street, Suite 7200
San Francisco, CA 94105
415-486-5555 (TDD 877-521-2172)

- U.S. Department of Education, national office:

Office for Civil Rights
800-872-5327

- Know Your Rights about Title IX:
http://www2.ed.gov/
California Coalition Against Sexual Assault (http://calcasa.org/)
1215 K. Street, Suite 1850
Sacramento, CA 95814
916-446-2520
- Domestic and Family Violence:

Office of Justice Programs, United States Department of Justice
http://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/

- 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.ovw.usdoj.gov/
- 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/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


## Immigration Requirements for Licensure

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (P.L. 104-193), also known as the Welfare Reform Act, includes provisions to eliminate eligibility for federal and state public benefits for certain categories of lawful immigrants as well as benefits for all illegal immigrants.

Students who will require a professional or commercial license provided by a local, state, or federal government agency in order to engage in an occupation for which the CSU may be training them must meet the immigration requirements of the Personal Responsibility and Work Opportunity Reconciliation Act to achieve licensure.

## 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 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.

## Undergraduate Enrollment in 600-, 700-, <br> and 800-Numbered Courses

1. Undergraduate students wishing to enroll in graduate level courses must file an undergraduate request form to enroll in graduate level courses prior to registering in any 600-, 700-, and 800- numbered courses.
2. Student must obtain permission of the instructor prior to submitting request form for approval.
3. Student must be a senior in good standing and have a B (3.0) GPA average in last 60 units.
4. Undergraduate enrollments may not cause the exclusion of a qualified graduate student in a graduate course.
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 <br> Grades and grade points per unit used in reporting are as follows:

 Grade of $\mathbf{A}$ (outstanding achievement; available only for the highest accomplishment), 4 points; $\mathbf{B}$ (praiseworthy performance; definitely above average), 3 points; 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; 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 A (outstanding achievement; available for the highest accomplishment), 4 points; B (average; awarded for satisfactory performance), 3 points; $\mathbf{C}$ (minimally passing), 2 points; $\mathbf{D}$ (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; 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.

## 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 Fare 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 (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 11:59 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 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. Such 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 $W U$ 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 p.m. on the 10th day from the first day of classes.

## Credit/No Credit - Cr/NC <br> (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 (Cr/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 (Cr/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 15th day of instruction by 6:00 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 reduced to writing by the instructor and given to you with a copy placed on file with the department chair until the Incomplete is removed or the time limit for removal has passed. 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 you could make up the work would be to attend a major portion of the class when it is next offered. Contract forms for Incomplete grades are available at department offices or the Office of the Registrar website at http://www.sdsu.edu/registrar.

An Incomplete must be made up within one calendar year immediately following the end of the term in which it was assigned. This limitation prevails whether or not you maintain continuous enrollment. 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 you 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 your record must provide an accurate and complete accounting of your 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 authorized incomplete I 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.

## Withdrawal Unauthorized Grade - WU

The symbol WU indicates that you 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 $W U$ should be assigned.

## 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.)

## Repeated Courses

Undergraduate students may repeat courses only if they earned grades lower than a C. A student who receives a grade of C- (fewer than 2.0 grade points per unit) or lower 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. A course may be repeated once for course forgiveness. A 28 unit limit will be applied to repeated courses, including those in which course forgiveness has been approved.

1. In the semester in which you are repeating a course for which you want an earlier grade forgiven, you must file a Course Forgiveness request via the SDSU WebPortal. While the original grade(s) will remain on your record, the grade earned in the repeat, whether higher or lower than the original grade, will be used in place of the earlier grade in the calculation of grade point averages.
2. The course forgiveness and course repeat policy applies only to repeats of the same course (same number, same title, and, for Experimental Topics courses, same subtitle). Exceptions will be made only in those cases where the course number changes and the change is documented in the General Catalog.
3. In some cases, admission to courses may have become restricted due to impaction, limitation by major code, enforcement of prerequisites, or sequence requirements (e.g., mathematics and foreign language). In those cases, you are prohibited from repeating those courses.
4. The only courses which may be repeated Credit/No Credit are those in which you previously received No Credit; if a course previously taken for a grade is repeated Credit/No Credit, the original grade will continue to be calculated in grade point averages. Repeating courses in which the original grade was No Credit (NC) does not require the filing of the Course Forgiveness request.
5. The course forgiveness policy may be extended to courses originally taken elsewhere and repeated at San Diego State University, in which case the original transfer grade will no longer be used in the calculation of the overall grade point average. However, the course forgiveness policy applies only to courses repeated at San Diego State University.
6. The course forgiveness policy applies to courses repeated at San Diego State University in summer terms and to courses repeated through Open University during the summer term, fall and/or spring semesters.
7. If courses with C- or lower grades are repeated without course forgiveness approval or in excess of course repeat limitations, all grades for those courses will be calculated in grade point averages. Units for a course will be counted only once toward graduation, regardless of the number of repeats.
8. Course forgiveness is only applicable to undergraduate students pursuing a first bachelor's degree.
9. Per University Senate policy, course forgiveness will not be granted if the Center for Student Rights and Responsibilities finds the student responsible for academic dishonesty in that particular course.

## 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. 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, interdisciplinary studies in three departments, and liberal studies majors will be listed by the dean of undergraduate studies.

## 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 prior to second semester registration. 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 end of the second semester of attendance. 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 must 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 required freshman competency requirements in writing and mathematics (EPT and ELM) or is currently registered in competency 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 RequirementConcurrent 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 postbaccalaureate 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, 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 postbaccalaureate 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 CollegeLevel 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). 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 College Board Advanced Placement Program.

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 33 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.

| Advanced Placement Credit |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| EXAMINATION | SCORE | Semester units credit allowed toward degree | SDSU COURSE EQUIVALENTS* | REMARKS |
| Art History | 3, 4, 5 | 6 | Art 258 and 259 |  |
| Art, Studio: 3, 4,5 A |  |  |  |  |
| Drawing | 3, 4, 5 | 3 | Art 100 |  |
| 2D Design | 3, 4, 5 | 3 | Art 101 |  |
| 3D 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, 201 unit 1 | Satisfies the language requirement |
| Classics: |  |  |  |  |
| Latin | 3, 4 | 5 | Classics 202L |  |
| Computer Science |  |  |  |  |
|  |  |  |  |  |
|  | 4, 5 | 3 | Computer Science 107 |  |
| Economics: |  |  |  |  |
| Macro | 3, 4, 5 | 3 | Economics 101 |  |
| Micro | 3, 4, 5 | 3 | Economics 102 |  |
| English: |  |  |  |  |
| Lang. and Comp. | 5 | 6 | Rhetoric and Writing Studies 100 and 200 | Exempts from CSU English Placement Test. |
|  | 3,4 | 6 | Rhetoric and Writing Studies 100 and 3 units of Rhetoric and Writing Studies 299 | Exempts from CSU English Placement Test. |
| Lit. and Comp. | 3, 4, 5 | 6 | English 220 and Rhetoric and Writing Studies 100 | Exempts from CSU English Placement Test. |
| 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 220 and 221 | requirement. |
| Geography: |  |  |  |  |
| German Language and Culture | 3 | 6 | German 202 | Satisfies the language |
|  | 4, 5 | 8 | German 205A and 205B | requirement. |
| History: <br> 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 | 3, 4, 5 | 6 | History 100, 101 |  |
| Italian Language and Culture | 3 | 6 | Italian 201 | Satisfies the language |
|  | 4 | 6 | Italian 201, 211 | requirement. |
|  | 5 | 6 | Italian 211, 212 |  |
| Japanese Language and Culture | 3 | 6 | Japanese 111, 112 |  |
|  | 4 | 6 | Japanese 111, 112, 211 | Satisfies the language |
|  | 5 | 6 | Japanese 111,112, 211, 212 | requirement. |
| Mathematics: |  |  |  |  |
| Calculus AB/AB Subscore | 3, 4, 5 | 4 | Mathematics 150 | Exempts from CSU ELM Test. |
| Calculus BC | 3, 4, 5 | 8 | Mathematics 150 and 151 | Exempts from CSU ELM Test. |
| Calculus BC and AB Subscore | 3, 4, 5 | 8 | Mathematics 150 and 151 | Exempts from CSU ELM Test. |
| Calculus AB and BC | 3, 4, 5 | 8 | Mathematics 150 and 151 | Exempts from CSU ELM Test. |
| Calculus AB, BC, and |  |  |  |  |
| AB Subscore | 3, 4, 5 | 8 | Mathematics 150 and 151 Music 205A and 205B** | Exempts from CSU ELM Test. |
| Physics: 3,4 Physics 180 A 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 | 6 | Political Science 101 and 103 | Satisfies American History/Institutions |
| Govt./Politics: United States | 3, 4, 5 | 6 | Political Science 101 and 102 | and Ideals, and U.S. Constitution |
| Govt./Politics: United States and |  |  |  | requirements. Does not satisfy California |
| Comparative | 3, 4, 5 | 9 | Political Science 101, 102, 103 | Government requirement. |
| Psychology Spanish Language and Culture | $3,4,5$ | 3 | Psychology 101 Spanish 201 and 211 |  |
| Spanish Language and Culture | 4,5 | 6 | Spanish 201 and 211 | Satisfies the language requirement. |
| Spanish Literature and Culture | 3, 4, 5 | 6 | Spanish 405A-405B |  |
| Statistics | 3, 4, 5 | 3 | Statistics 250 | Exempts from CSU ELM Test. |

* 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.

| 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 |
| Information Systems and Computer Applications | 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: Humanities, Literature |
| Analyzing and Interpreting Literature | 50 | 3 | No | Foundations of Learning: Humanities, Literature |
| College Composition | 50 | 6 | No | Communication and Critical Thinking: Composition and Intermediate Composition |
| College Composition Modular | 50 | 6 | No | Communication and Critical Thinking: Composition and Intermediate Composition |
| English Literature | 50 | 3 | No | Foundations of Learning: Humanities, Literature |
| Humanities | 50 | 3 | Humanities 101 |  |
| Foreign Language |  |  |  |  |
| French Language, Level 1 | 50 | 6 | No | Foundations of Learning: Foreign Language. |
| French Language, Level 2 | 59 | 12 | No | Foundations of Learning: Foreign Language. Satisfies language requirement. |
| German Language, Level 1 | 50 | 6 | No | Foundations of Learning: Foreign Language. |
| German Language, Level 2 | 60 | 12 | No | Foundations of Learning: Foreign Language. Satisfies language requirement. |
| Spanish Language, Level 1 | 50 | 6 | No | Foundations of Learning: Foreign Language. |
| Spanish Language, Level 2 | 63 | 12 | No | Foundations of Learning: Foreign Language. Satisfies language requirement. |
| History and Social Science |  |  |  |  |
| \# American Government | 50 | 3 | Pol S 102 | U.S. Constitution |
| Educational Psychology, Introduction to | 50 | 3 | 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 |
| * 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; Humanities, History |
| 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 |  |
| \# Does not satisfy the American Institutions California Government requirement. <br> * Only one of these examinations can be used in Foundations of Learning: Social and Behavioral Sciences. |  |  |  |  |


| International Baccalaureate Credit |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| EXAMINATION | SCORE | Semester units credit allowed toward degree | 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. |
| 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 | Exempts from CSU Entry Level Mathematics Test. |
| Dance | Higher 4-7 | 3 | Dance 299 | Satisfies Foundations of Learning, Humanities (II.C.2.). |
| 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 | Exempts from CSU English Placement Test. |
| English A: Literature | Higher 4-7 | 6 | English 220 and Rhetoric and Writing Studies 100 | Exempts from CSU English Placement Test. |
| Film | Higher 4-7 | 3 | Television, Film and New Media 160 |  |
| French B | Higher 4-7 | 6 | French 220 and 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. |
| Hindi B | Higher 4-7 | 3 | Linguistics 299 | Satisfies Foundations of Learning, Humanities (II.C.5.) and language graduation requirement. |
| History (any region) | Higher 5-7 | 6 | History 100 and 101 |  |
| 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. |
| 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. Exempts from CSU Entry Level Mathematics Test. |
| Music | Higher 4-7 | 3 | Music 299 | Satisfies Foundations of Learning, Humanities (II.C.2.). |
| Philosophy | Higher 4-7 | 3 | Philosophy 299 | Satisfies Foundations of Learning, Humanities (II.C.4.). |
| Physics | Higher 5-7 | 6 | Physics 180A and 182A | Two additional units of Physics 299. |
| Portuguese B | Higher 4-7 | 6 | Portuguese 201 |  |
| 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. |
| Theatre | Higher 4-7 | 6 | Theatre 100 | Three additional units of Theatre 299. |
| Visual Arts | Higher 4-7 |  | See department. |  |
| * 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

Students may challenge courses by taking examinations developed at San Diego State University. Up to 30 units will be awarded to those who pass the examinations successfully, and the grade(s) earned, including F, will be used in San Diego State University grade point calculations. At the discretion of the department a grade of $\mathrm{Cr} / \mathrm{NC}$ may be awarded instead of a letter grade; a maximum of 15 total Cr units may be applied toward an undergraduate degree.

If you are interested in applying for credit by examination you need to check with the appropriate department(s) since each department has the option of excluding any or all 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. You must be matriculated, in good standing (not on probation), be registered in at least one regular course (not Extension) at the time credit by examination is authorized, and pay for additional units if cost exceeds fees already paid.
2. You must register in the course for which credit by examination is being requested within the time limits for filing a change of program as listed in the academic calendar each semester.
3. Approval of the department chair and the dean of the college concerned is required prior to taking the examination. Forms for approval may be obtained from the Office of the Registrar.
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4. 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 toward the 30-unit minimum residency requirement.
5. 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.
6. Credit by examination is restricted to the regular summer, fall, or spring semester.

## 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 the Registrar. 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 SMART or AARTS transcript, 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 an accredited institution and who has been admitted to the university with postbaccalaureate 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. 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.

## Schedule Adjustment

Schedule adjustment includes: dropping a class, adding a class, adding or reducing units of a class for which the student is already registered, changing a section of the same class, withdrawing from the university, or changing grading options. Students should check their online schedules regularly and take necessary action to add
or drop during the schedule adjustment period. Students who do not attend a class and who do not ensure that the course is officially dropped in the WebPortal at http://www.sdsu.edu/portal, will receive a failing grade. Schedule adjustments are accepted until 11:59 p.m. on the following dates:

## Fall 2015 Semester - September 4, 2015. Spring 2016 Semester - February 2, 2016.

Students are responsible for every course in which they are registered. If students do not attend the first class meeting of the semester and are not present at the start of the second meeting, the professor may give the place to another student. If this occurs, the student has forfeited the place and may be dropped from the course by the instructor within the first eight class days of the semester. The instructor may request that you personally take formal action to drop the class. Not all instructors will drop students who miss the first class session. Students are responsible for checking the accuracy of their schedules by the deadline and making any necessary adjustments to ensure their schedule is correct.

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 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 the student's major.

## 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 16 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. 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 your application for admission, you 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.

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 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.

The procedure for filing for Academic Renewal is as follows:

1. Discuss the situation with the Assistant Dean in the Division of Undergraduate Studies.
2. Write a letter to the Academic Renewal Committee describing the extenuating circumstances.
3. Obtain statements from doctors, lawyers, employers, parents, professors, or other appropriate persons to substantiate your claim that the request is justified
4. Return all materials to the Division of Undergraduate Studies, Administration, Room101.
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 the university after enrolling for any academic term must 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 11:59 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 11:59 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. Such 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 repayments 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

## One-Semester Stop Out

With certain exceptions, matriculated undergraduate and graduate students may stop out of the university one semester in a calendar year and maintain their continuing student status Continuing status maintains existing requirements for graduation. Disqualified students, students absent for more than one semester without an approved leave of absence, and those who attend another institution for more than one semester must apply for readmission should they wish to return to San Diego State University. Students who are disqualified are not eligible for a one-semester stop out.

## Educational Leave of Absence

Students are permitted to take up to four semesters of approved leave of absence. An educational leave of absence is appropriate in those cases where students will be engaged for the majority of the leave time in an activity, other than attending an accredited college or university, that is directly related to their formal academic careers or otherwise contributes to specific academic goals. Students must apply 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 request a leave of absence at http://www.sdsu.edu/portal.

Approval for educational leaves of absence will be granted only to undergraduate students who have completed a minimum of one semester at San Diego State University, who are in good academic standing, and who are eligible to register. Leaves will not be granted to students on probation, students who are subject to disqualification or have been disqualified, students who qualify for a change from undergraduate to graduate status, or students who have a registration hold.

## 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-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.

## Probation and Disqualification

## 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 the SDSU College of Extended Studies 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 administrativeacademic 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

A student who has been placed on administrative-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 the SDSU College of Extended Studies 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 student-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, 41304 of Title 5, California Code of Regulations. 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.

## University Policies

(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 campus 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, 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
(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.

## 41304. Student Disciplinary Procedures for

 the California State University.The chancellor shall prescribe, and may from time to time revise, a code of student disciplinary procedures for the California State University. Subject to other applicable law, this code shall provide for determinations of fact and sanctions to be applied for conduct which is a ground of discipline under Sections 41301 or 41302; the authority of the campus president in such matters; conduct related determinations on financial aid eligibility and termination; alternative kinds of proceedings, including proceedings conducted by a hearing officer; time limitations; notice; conduct of hearings, including provisions governing evidence, a record, and review; and such other related matters as may be appropriate. The chancellor shall report to the board actions taken under this section.

## 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 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 Copyright Laws <br> Anyone who is found to be liable for copyright infringement may

 be ordered to pay either actual damages suffered as a result of the infringement along with any profits of the infringer attributable to the infringement that are not already taken into account in computing the actual damages, or "statutory" damages between $\$ 750$ and $\$ 30,000$ per work infringed. (See 17 U.S.C. §504.) In the case of a "willful" infringement, a court may award up to $\$ 150,000$ per work infringed. 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 of up to five years and fines of up to $\$ 250,000$ per offense. Criminal penalties may vary depending on the nature of the offense and whether the infringer has previously been convicted of criminal copyright infringement under 18 U.S.C. §2319. (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, 619-5945742; 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://calbar.ca.gov/Public/Pamphlets/KidstheLaw. aspx or the California Alcohol Beverage Control website at http://www.abc.ca.gov/teencorner.html.
rederal 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://calbar.ca.gov/Public/Pamphlets/KidstheLaw.aspx.

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://aod.sdsu.edu.

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 State and Federal 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 3605, 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.

This policy implements Section 42356 of Title 5, California Code of Regulations and CSU Memorandum, 2002-26 and 2003-19, 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.

## 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 Crime Prevention Unit at 619-594-1985 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 3605, 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 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 3605, 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 Student Disability Services, Calpulli Center, Room 3100, 619-594-6473 (TDD: 619-5942929), 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 Department of Public Safety, 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 Department of Public Safety, 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.

Tnformation 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 expresses 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 Ombudsman, Student Services East, Room 1105, 619-594-6578, or at http://www.sa.sdsu.edu/ombuds.

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 thirty days of their eighteenth 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

## Office of the Ombudsman

Student Services East, Room 1105

## 619-594-6578

http://www.sa.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 a state law, including laws prohibiting fraud and false advertising, you may present your claim to the campus president or Office of the Ombudsman, Student Services East, Room 1105, 619-594-6578, http://www.sa.sdsu.edu/ombuds. The president or ombudsman 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 ombudsman, or by WASC, you may file an appeal with the Associate Vice Chancellor, Academic Affairs at the CSU Chancellor's Office. This procedure should not be construed to limit any right that you may have to take civil or criminal legal action to resolve your complaint.


## ADDENDA

## The Califomia State University

## The California State University

Welcome to the California State University (CSU) - the world's largest comprehensive higher education system in the nation with 23 unique campuses serving more than 450,000 students with 45,000 employees statewide. Each year, the university awards nearly 100,000 bachelor's, master's, and doctoral degrees. CSU graduates now total nearly three million strong, and are serving as leaders in the industries that drive California's economy, including business, agriculture, entertainment, engineering, teaching, hospitality, and healthcare. Learn more at www.calstate.edu.

## More than 50-Year Tradition of Excellence

Since 1961, the CSU has provided an affordable, accessible, and high-quality education to nearly three million graduates around the state of 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 educationa 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

- CSU faculty attract more than \$580 million annually in research and education grants, and contracts by federal, state, and regional agencies.
- One in every 10 employees in California is a CSU alumnus.
- The CSU awards 45 percent of the bachelor's degrees earned in California.
- More than half of all the nurses in the state earn their degrees from the CSU.
- The CSU awards 95 percent of the hospitality/tourism degrees in the state.
- Nearly half of all of the state's engineers earn their degrees from the CSU.
- The CSU is the leading provider of teacher preparation programs in the state.
- The CSU offers more than 115 fully online hybrid degree programs.
- The CSU offers 3,250 online courses to provide more educational options to students who may prefer an online format to a traditional classroom setting.
- The CSU's growing online concurrent enrollment program gives students the ability to enroll in courses offered by other campuses in the CSU system.
- The CSU serves more than 5,000 individuals annually through professional development certificate programs in educational health services, business and technology, leisure and hospitality, manufacturing, international trade, and many other industries.
- Nearly half of the CSU's 450,000 students are engaged in some type of community service, totaling 32 million hours of service annually.
- More than 9,000 students participate in STEM (science, technology engineering, and mathematics) service-learning courses.
- For every $\$ 1$ that the state invests in the CSU, the university generates $\$ 5.43$ for California's economy.


## Governance

The system 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 campuslevel chief executive officers. The trustees, chancellor, and presidents develop systemwide educational policy. The presidents, in consultation with the Academic Senate and other campus stakeholder groups, render and implement local policy decisions.

## CSU Historical Milestones

The individual California State Colleges was 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 (CSU). Today, the CSU is comprised of 23 campuses, including comprehensive and polytechnic universities and, since July 1995, the California 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-CSU Channel Islands-opened in fall 2002, with freshmen arriving in fall 2003.

In 1963, the State Academic Senate was established to act as the official voice of CSU faculty in systemwide matters. Also, the California State College Student Presidents Association-which was later renamed the California State Students Association-was founded to represent each campus student association on issues affecting students.

Through its many decades of existence, 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 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.

The CSU marked another significant educational milestone when it broadened its degree offerings to include doctoral degrees. The CSU independently offers educational doctorate (Ed.D.), Doctor of Physical Therapy (DPT), and Doctor of Nursing Practice (DNP) degree programs. A limited number of other doctoral degrees are offered jointly with the University of California and private institutions in California.

In 2010, in an effort to accommodate community college transfer students, the university, in concert with the California Community Colleges, launched the Associate Degree for Transfer, which guarantees transfer students admission to the CSU with junior status.

Always adapting to changes in technology and societal trends to support student learning and degree completion, the CSU initiated another milestone in 2013, when it launched Cal State Online, a systemwide collection of services that support the delivery of fully online programs from campuses. Now, full-time students also have access to fully online courses offered at other CSU campuses.

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. In 2014-15, the CSU will exceed three million alumni, which includes graduates from all CSU campuses as well as the Class of 2015.

The CSU strives to continually developing innovative programs, services, and opportunities that will give students the tools they need to meet their full potential. With 23 campuses, 450,000 students and 45,000 faculty and staff, the CSU is committed to providing a quality higher education that prepare students to become leaders in the changing workforce

## 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 2014-15 budget amounts were \$2,399,439,000 from state General Fund (GF) appropriations (not including GF debt service) and before adding $\$ 71.1$ million CalPERS retirement adjustment, $\$ 1,592,256,000$ from tuition fee revenue and after tuition fee discounts (forgone revenue), and \$453,018,000 from other fee revenues for a total of $\$ 4,444,713,000$. The 2014-15 resident FTES target is 346,050 and the nonresident FTES based on past-year actual is 15,568 for a total of 361,618 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 full-time student's academic load).

The 2014-15 average support cost per FTES based on GF appropriation and net tuition fee revenue only is $\$ 11,324$ and when including all sources as indicated below is $\$ 13,396$, which includes all fee revenue (e.g. tuition fees, application fees, and other campus mandatory fees) and debt service in the CSU Operating Fund. Of this amount, the average net tuition and other fee revenue per FTES is $\$ 5,643$.

The average CSU 2014-15 academic year, resident, undergraduate student basic tuition fee and other mandatory fees required to apply to, enroll in, or attend the university is $\$ 6,759$ ( $\$ 5,472$ tuition fee plus $\$ 1,287$ 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.

| 2014-15 | Average Cost Per |  |  |
| :---: | :---: | :---: | :---: |
|  | Amount | FTES | Percentage |
| - State Appropriation (GF) ${ }^{1}$ | 2,399,439,000 | 6,934 | 51.8\% |
| - General Fund Debt Service ${ }^{2}$ | 296,316,000 | 819 | 6.1\% |
| - Net Tuition Fee Revenue ${ }^{3}$ | 1,592,256,000 | 4,390 | 32.8\% |
| - Other Fees Revenue ${ }^{3}$ | 453,018,000 | 1,253 | 9.3\% |
| Total Support Cost | \$4,741,029,000 | \$13,396 | 100\% |

1 Represents state GF appropriation in the Budget Act of 2014-15; GF is divisible by resident students only ( 346,050 FTES) and does not include General Fund Debt Service.
2 A major change in the CSU budget appropriation beginning in 2014-15 is the fold in of state General Obligation bond debt service expense (\$197.2M) into the CSU main appropriation and movement of CSU lease revenue bonds debt service from a separately identified appropriations item to the CSU main appropriation item (\$99.1M).
${ }_{3}$ Represents CSU Operating Fund, Tuition Fee and other fees revenue amounts (net of tuition fee discounts) submitted in campus August 2014-15 final budgets. Revenues are divisible by resident and nonresident students ( 361,618 FTES).

## Trustees of The California State University

Ex Officio Trustees
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The Honorable Gavin Newsom Lieutenant Governor of California

The Honorable Toni G. Atkins
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Chair
Mr. Steve Relyea Treasurer
Mr. Famroze Virjee Secretary

## 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.
Roberta Achtenberg (2015) Lupe C. Garcia (2020)
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Adam Day (2015)
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Douglas Faigin (2017)
Debra S. Farar (2022)
Margaret Fortune (2016)
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Lou Monville (2016)
Hugo N. Morales (2020)
J. Lawrence Norton (2019)

Steven Stepanek (2015)

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 — CSU System Mr. Steve Relyea.................................. Executive Vice Chancellor and Chief Financial Officer
Dr. Ephraim P. Smith .......................... Executive Vice Chancellor and Chief Academic Officer
Mr. Famroze Virjee..... Executive Vice Chancellor and General Counsel Mr. Garrett P. Ashley .................. Vice Chancellor, University Relations and Advancement
Ms. Lori Lamb. $\qquad$ Vice Chancellor, Human Resources
Mr. Larry Mandel ................. Vice Chancellor and Chief Audit Officer

## Campuses - The California State University

California State University, Bakersfield
9001 Stockdale Highway, Bakersfield, CA 93311-1022
Dr. Horace Mitchell, President
661-654-2782 • http://www.csub.edu

## California State University, Channel Islands

One University Drive, Camarillo, CA 93012
Dr. Richard R. Rush, President
805-437-8400 • http://www.csuci.edu
California State University, Chico
400 West First Street, Chico, CA 95929
Dr. Paul J. Zingg, President
530-898-4636 • http://www.csuchico.edu
California State University, Dominguez Hills
1000 East Victoria Street, Carson, CA 90747
Dr. Willie Hagan, 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
Dr. Mildred Garcia, President
657-278-2011 • http://www.fullerton.edu

## Humboldt State University

1 Harpst Street
Arcata, CA 95521-8299
Dr. Lisa Rossbacher, President
707-826-4402• 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 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
831-582-3330 • 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, Ромona
3801 West Temple Avenue, Pomona, CA 91768
Dr. Soraya M. Coley, President
909-869-7659 • http://www.csupomona.edu
California State University, Sacramento
6000 J Street, Sacramento, CA 95819
Dr. Alexander Gonzalez, 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. Elliot Hirshman, President
619-594-5200 • http://www.sdsu.edu

## *Imperial Valley Campus

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. Leslie E. Wong, President
415-338-1111 • http://www.sfsu.edu

## San José State University

One Washington Square, San Jose, CA 95192-0001
Dr. Mohammad H. Qayoumi, 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. Karen S. Haynes, President
760-750-4000 • http://www.csusm.edu

## Sonoma State University

1801 East Cotati Avenue, Rohnert Park, CA 94928
Dr. Ruben Armiñana, President
707-664-2880 • http://www.sonoma.edu

## California State University, Stanislaus

One University Circle, Turlock, CA 95382
Dr. Joseph F. Sheley, President
209-667-3122 • http://www.csustan.edu

# Faculty and Administration 

Tenured, Tenured-track Faculty, and Administration

Emeritus Faculty Lecturers
Ad unct Faculty

## 2014-2015 Tenured, Tenured-Track Faculty, and Administration

Hirshman, Elliot (2011) $\qquad$ President; Professor of Psychology B.A., Yale University; M.A., Ph.D., University of California, Los Angeles.

Abalahin, Andrew J. (2005). $\qquad$ . Assistant Professor of History B.S., Georgetown University; Ph.D., Cornell University.

Abarbanell, Linda (2014).. ........
. University of Illinois at Urbana-Champaign; M.S., Hunter College; Ed. D., Harvard University.
Abdel-Nour, Farid (2000). $\qquad$ .Associate Professor of Political Science B.S., Ph.D., Rutgers, The State University of New Jersey.

Abdel-Samad, Mounah (2010). $\qquad$ .. Assistant Professor of Public Affairs B.A., M.A., American University of Beirut; Ph.D., University of Albany.

Adams, Brian E. (2003) $\qquad$ Professor of Political Science B.A., University of Southern California; M.A., Ph.D., University of California, Irvine.

Addo, Theophilus (1987).. $\qquad$ .Associate Professor of Management Information Systems
B.Sc., University of Ghana; M.S.T.M., American University, Washington, D.C.; M.B.A., Ph.D., Indiana University, Bloomington.
Ahsan, Mujtaba (2013). $\qquad$ Professor of Management
B.E., Banglore University; M.B.A., Indiana University; Ph.D., University of Wisconsin, Milwaukee.
Aitken, Stuart C. (1986) $\qquad$ Professor of Geography B.Sc., Glasgow University; M.A., Miami University; Ph.D., University of Western Ontario.

Akbari Hamed, Kaveh (2014)..............Assistant Professor of Mechanical Engineering B.Sc., University of Tabriz; M.Sc., Ph.D., Sharif University of Technology, Iran.

Alameen-Shavers, Antwanisha V. (2013).........Assistant Professor of Africana Studies B.A., San Diego State University; M.A., Ohio State University; Ph.D., Temple University.

Alcaraz, John E. (1993) ....................................Associate Professor of Public Health B.A., M.A., Ph.D., University of California, San Diego.

## Alcosser, Sandra B. (1986)

$\qquad$ ..Professor of English B.A., Purdue University; M.F.A., University of Montana.

Alexseev, Mikhail A. (2000)
$\qquad$
B.A., M.A., Kiev State University; Ph.D., University of Washington.

Alfaro, Cristina (2004)...............................Associate Professor of Dual Language and English Learner Education
B.A., M.A., San Diego State University; Ph.D., Claremont Graduate University and San Diego State University.
Alimohammad, Amirhossein (2011)..
)............................Assistant Professor of Electrical and Computer Engineering
B.Sc., University of Isfahan; M.Sc. University of Tehran; Ph.D., University of Alberta.

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Eckberg, Carl F. (1969)................................Associate Professor of Computer Science A.B., Cornell University; M.S., Ph.D., Purdue University.

Edgerton-Tarpley, Kathryn J. (2002) .. $\qquad$ .. Associate Professor of History
B.A., Wesleyan University; M.A., Ph.D., Indiana University.

Edson, Laurie D. (1988)....................Professor of English and Comparative Literature
B.A., University of Wisconsin; M.A., University of California, Irvine; Ph.D., Stanford University.

Edwards, Matthew S. (2002) . $\qquad$ Professor of Biology
B.A., University of California, Santa Barbara; M.S., San Francisco State University; Ph.D., University of California, Santa Cruz.
Edwards, Robert A. (2007)..........................Associate Professor of Computer Science B.Sc., De Montfort University; Ph.D., University of Sussex.

Eger, John M. (1990) ................. The Lionel Van Deerlin Professor of Communication and Public Policy
B.A., Virginia Military Institute; J.D., John Marshall Law School.

Ehrhart, Karen M. (2001) ...................................... Associate P
B.A., Westmont College; M.A., Ph.D., University of Maryland.
Ehrhart, Mark G. (2001) ..........................................Associate Professor of Psychology B.S., Georgia Institute of Technology; M.A., Ph.D., University of Maryland.

Elkind, Sarah S. (2000) .................................................................... Professor of History B.A., Wesleyan University; M.A., Ph.D., University of Michigan.

Ely, David P. (1986).....................................Interim Associate Dean, Academic Affairs, College of Business Administration; Professor of Finance B.S., West Virginia University; M.S., Ph.D., The Ohio State University.

Emmorey, Karen D. (2005) .... Albert W. Johnson Distinguished Professor of Speech, Language, and Hearing Sciences
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Engin, Arif Ege (2008)...
...Associate Professor of Electrical and Computer Engineering
B.S., Middle East Technical University, Turkey; M.S., University of Paderborn, Germany; Ph.D., University of Hannover, Germany.
Engstrom, David W. (2000) ...................................................... Professor of Social Work B.A., Wesleyan University; M.A., Ph.D., University of Chicago.

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Esbenshade, Jill (2001) $\qquad$ ..Associate Professor of Sociology B.A., Brown University; M.A., Ph.D., University of California, Berkeley.

Espinosa, Salvadore (2008) .............................. Assistant Professor of Public Affairs B.A. Universidad Panamericana, Mexico; M.A., Ph.D., Indiana University.

Etschmaier, Gale S. (2011)...................................Dean, Library and Information Access B.A., State University of New York at Stony Brook; M.L.S., State University of New York at Albany; Ed.D., University of Pennsylvania.
Evans, Ronald W. (1989) ................................................
B.A., M.S., Oklahoma State University; Ed.D., Stanford Professor of Teacher Education B.A., M.S., Oklahoma State University; Ed.D., Stanford University.

Ewald, Liana (2006). $\qquad$ Associate Professor of Spanish B.A., University of Massachusetts; M.S., Middlebury College; Ph.D., Boston University.

Fan, Juanjuan (2002) ... $\qquad$ .... Professor of Statistics
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Farley, Kathleen A. (2006).................................. Associate Professor of Geography B.A., University of California, Los Angeles; M.A., American University; Ph.D., University of Colorado.
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B.S., Wright State University; M.A., San Diego State University; Ph.D., San Diego State University and Claremont Graduate University.
Farris, Kathryn (2011)...Associate Professor of English and Comparative Literature B.A., University of California, Berkeley; M.F.A., Brown University.

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Finlayson, Tracy L. (2007) $\qquad$ Associate Professor of Public Health B.S., University of California, Davis; Ph.D., University of Michigan.

Finnegan, Daniel J. (1990).. $\qquad$ ..... Associate Professor of Social Work B.S., M.S.W., Ph.D., University of Illinois at Urbana-Champaign.

Fisher, Douglas (1998).. $\qquad$ .. Professor of Educational Leadership B.A., San Diego State University; E.M.B.A., Claremont Graduate University; Ph.D., San Diego State University and Claremont Graduate University.
Fitzsimmons, Lorraine T. (1985) .....................................Associate Professor of Nursing B.A., Marymount Manhattan College; M.A., Ball State University; D.N.S., Indiana University Purdue University at Indianapolis.
Flanigan, Shawn T. (2007) ...................................Associate Professor of Public Affairs B.A., M.P.A., University of New Mexico; Ph.D., State University of New York at Albany.

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Foad, Hisham S. (2006) ................................. Associate Professor of Economics B.A., Kenyon College; M.A., Ph.D., Emory University.

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Freeman, Mark W. (2000)............................ Professor of Theatre, Television, and Film B.F.A., M.F.A., San Francisco Art Institute.

Frey, Nancy (2002) ................................................ Professor of Educational Leadership B.A.E., Florida Atlantic University; M.A., San Diego State University; Ph.D., Claremont Graduate University and San Diego State University.
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Friedrichs, Charles J. (1983) ........................................... Associate Professor of Music B.A., California State University, Fullerton; M.A., San Diego State University; Ed.D., University of San Diego.
Friend, Margaret (1997)..........................................Associate Professor of Psychology B.A., University of South Florida; M.S., Ph.D., University of Florida.

Frost, Eric G. (1980) ...................................................Professor of Geological Sciences A.B., University of Washington; M.S., University of Arizona; Ph.D., University of Southern California.
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Ghosh, Huma Ahmed (1994) $\qquad$ .Professor of Women's Studies B.A., University of Delhi; M.A., Jawaharlal Nehru University; Ph.D., Syracuse University.

Gibson, Sharan A. (2002).. $\qquad$ ...Professor of Teacher Education B.A., University of California, Santa Barbara; M.S., National University; Ph.D., The Ohio State University.
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Guang, Lei (1999).. $\qquad$ .. Professor of Political Science B.A., Luoyang University, China; M.A., Johns Hopkins University; Ph.D., University of Minnesota.
Gubellini, Stefano (2006) $\qquad$ ..Associate Professor of Finance Laurea, University of Bologna, Italy; M.S., Ph.D., Purdue University.
Gupta, Madhu S. (2000) .. $\qquad$ . The Radio Frequency Communications Systems Industry Professor; Professor of Electrical and Computer Engineering; B.S., Lucknow University; M.S., Allahabad University; M.S., Florida State University; Ph.D., University of Michigan.
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Harley, Bruce L. (1990).. $\qquad$ B.A., Pennsylvania State University; M.A., State University of New York at Binghamton; M.L.S., San Jose State University.
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Hebert, Matthew G. (2007)................................Associate Professor of Art and Design B.A., University of California, Berkeley; M.F.A., California College of Arts and Crafts.

Hedin, Marshal C. (1999) $\qquad$ Professor of Biology
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Hee, Kevin W. (2008) $\qquad$ ... Assistant Professor of Accountancy B.S., M.S., University of Virginia; Ph.D., University of Colorado at Boulder.

Henry, Stuart D. (2006, except 2010-2011) .............................Professor of Public Affairs B.A, Ph.D., University of Kent, England.

Hentschel, Brian T. (2000).............................................. Associate Professor of Biology B.S., University of South Carolina; M........................................ Ph.D., University of Washington.

Herman, Peter C. (1996)...................Professor of English and Comparative Literature B.A., McGill University; M.A., Ph.D., Columbia University.

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Herrera, Carlos R. (2000) .....Associate Professor of History, Imperial Valley Campus B.A., M.A., University of San Diego; Ph.D., University of New Mexico.

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Hoh, Eunha (2009). $\qquad$ ..Associate Professor of Public Health B.A., M.S., Korea Advanced Institute of Science and Technology; Ph.D., Indiana University.

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Hokoda, Audrey (1999) ............................ Professor of Child and Family Development B.S., University of California, Los Angeles; M.A., Ph.D., University of Illinois at UrbanaChampaign.
Holcomb, Phillip J. (2013)..........................................................Professor of Psychology B.A., San Diego State University; Ph.D., University of New Mexico.

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Hong, Mee Young (2007).... Associate Professor of Exercise and Nutritional Sciences B.S., M.S., Ewha Woman's University, Korea; Ph.D., Texas A\&M University.

Hooshmand-Yazdi, Shirin (2011)........................... Assistant Professor of Exercise and Nutritional Sciences
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Hope, Allen S. (1986). $\qquad$ ..Professor of Geography B.S., M.Sc.Eng., University of Natal, South Africa; Ph.D., University of Maryland.

Hopkins, Donald J. (2005) ........ Associate Professor of Theatre, Television, and Film B.A., Pennsylvania State University; M.F.A., University of California, San Diego; Ph.D., University of California, Irvine and University of California, San Diego.
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B.A., San Francisco State University; M.A., Western Michigan University; M.P.H., University of California, Berkeley; Ph.D., University of Kansas.
Howard, Yetta (2011) ..... Assistant Professor of English and Comparative Literature B.A., Boston University; M.A., Mills College; Ph.D., University of Southern California.

Hua, Anh Nhuoc (2008). $\qquad$ .Associate Professor of Women's Studies B.A., M.A., Ph.D., York University.

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Hui, Stefen (1988) $\qquad$ ...Professor of Mathematics B.A., University of California, Berkeley; M.S................................................. University of Washington.

Hunter, Lauren P. (2004)... $\qquad$ Professor of Nursing B.S.N., University of Colorado at Denver; M.S., University of Arizona; Ph.D., University of California, San Diego.
Huntington, Barbara W. (1996) $\qquad$ ....Lecturer in Sciences, General B.S., San Diego State University; M.B.A., University of California, Los Angeles.

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Imazeki, Jennifer (2000)... Professor of Economics [Senate Distinguished Professor] B.A., Pomona College; M.S., Ph.D., University of Wisconsin.

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Interlando, J. Carmelo (2005).. $\qquad$ Associate Professor of Mathematics B.S., Ph.D., University of Campinas; Ph.D., University of Notre Dame.

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Jacobs, Gustaaf (2006).........................................Professor of Aerospace Engineering M.S., Delft University, Netherlands; Ph.D................................iversity of Illinois at Chicago.

Jaffe, Harold (1982)................................................................ Professor of English B.A., Grinnell College; M.A., Ph.D., New York University.

James-Ward, Cheryl M. (2007).......... Associate Professor of Educational Leadership B.A., M.A., University of California, Santa Barbara; Ed.D., University of Southern California.

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Jones, Loring P. (1989)........................................................Professor of Social Work B.A., Belmont Abbey College; M.S.W., Virginia Commonwealth University; D.S.W., University of California, Los Angeles.
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Vaughn, Allison A. (2008) $\qquad$ . Assistant Professor of Psychology B.A., California State Polytechnic University; M.A., San Diego State University; Ph.D., University of Utah.
Vaughn, Meredith E. (2008). $\qquad$ .Associate Professor of Teacher Education B.S., Allegheny College; M.Ed., Ph.D., Boston College.

Velasquez, Roberto J. (1987)... $\qquad$ ...Associate Professor of Psychology B.A., University of California, Riverside; M.S., Harvard University; Ph.D., Arizona State University.
Venkataraman, Satchi (2002).. $\qquad$ ..Professor of Aerospace Engineering B.E., Anna University, India; M.S., Clemson University; Ph.D., University of Florida.

Verity, Larry S. (1984) ...... Associate Dean, College of Health and Human Services; Professor of Exercise and Nutritional Sciences
B.S., State University of New York, Cortland; M.Ed., University of Virginia; Ph.D., Purdue University.
Verzi, Diana W. (2001) $\qquad$ ...Professor of Mathematics, Imperial Valley Campus B.A., San Diego State University; M.A., Arizona State University; Ph.D., Claremont Graduate University.
Villagrana, Margarita (2014). $\qquad$ ...Assistant Professor of Social Work B.A., California State University, Northridge; M.S.W., California State University, Long Beach; Ph.D., University of Southern California.
Walders, Patrick M. (2011) $\qquad$ Associate Professor of Music B.M., State University of New York at Fredonia; M.M., Westminster Choir College of Rider University; D.M.A., University of Maryland at College Park.
Walsh, Kenneth D. (2002)........The AGC Paul S. Roel Chair in Construction Engineering and Management; Professor of Civil, Construction, and Environmental Engineering B.S.E., M.S., Ph.D., Arizona State University. Registered Professional Engineer.

Wang, Minjuan (2000) $\qquad$ . Professor of Learning Design and Technology B.A., Peking University; M.A., Pennsylvania State University; Ph.D., University of MissouriColumbia.
Wang, Ruoxuan (2014) ....Assistant Professor of Management Information Systems B.E., Tsinghua University, China; Ph.D., University of Florida.

Wang, Wei (2014).......................................Assistant Professor of Computer Science B.S., M.A., Xian Jiaotong University, China; Ph.D., University of Nebraska.

Waters, Elizabeth R. (2002) $\qquad$ ..... Associate Professor of Biology B.A., Grinnell College; M.S., North Carolina State University; Ph.D., Washington University.

Waters, Joseph (2001)........................................................................................ B.A., University of Minnesota; M.M., Yale University; Ph.D., University of Oregon.

Wauchope, Mary M. (1989)........................................ Associate Professor of German B.A., M.A., University of California, Riverside; Ph.D., University of California, Berkeley.
Wawrytko, Sandra A. (2003)

$\qquad$
Professor of Philosophy B.A., Knox College; M.A., Ph.D., Washington University, St. Louis.
Weber, Fridolin (2003)...................................................................................... M.S., Ph.D., University of Munich, Germany.
Weersing, V. Robin (2006).......................................Associate Professor of Psychology B.S., Linfield College; M.A., Ph.D., University of California, Los Angeles.
Wells, Kristen (2013).................................................. Assistant Professor of Psychology M.P.H., Emory University; Ph.D., University of South Florida.
Welsh, William F. (2000).............................................................. Professor of Astronomy B.S., State University of New York at Stony Brook; Ph.D., The Ohio State University.
Welter, Stephen C. (2011, except 1985-2010) .............. Vice President for Research and Graduate Dean; Professor of Biology
B.S., University of California, Davis; Ph.D., University of California, Riverside.
Werry, Christopher (2000) ........Associate Professor of Rhetoric and Writing Studies B.A., Victoria University of Wellington; M.A., Ph.D., Carnegie Mellon University.
Westermo, Bruce D. (1980)............................Associate Dean, College of E Professor of Civil, Construction, and Environmental Engineering B.S., Illinois Institute of Technology; M.S., Ph.D., California Institute of Technology.
Weston, Charles (2006).....................................
B.A., B.S., M.L.S., Louisiana State University.
Weston, Thomas S. (1974)..........................................................Professor of Philosophy S.B., Ph.D., Massachusetts Institute of Technology.
Wheeler, Mark R. (1995) ...........................................Associate Professor of Philosophy B.A., Colgate University; M.A., Ph.D., University of Rochester.
Whitaker, Jr., Delroi (2014).............................Assistant Professor of Religious Studies B.A., San Diego State University; M.D., Princeton University; M.T., Harvard University; Ph.D., Claremont Graduate University,
Whitney, Roger E. (1985).............................Associate Professor of Computer Science B.S., North Dakota State University; Ph.D., University of California, San Diego.
Wiese, Andrew (1996).............................................................................. Professor of History B.A., University of lowa; M.A., Ph.D., Columbia University.
Williams, Kathy S. (1987) ................................................................ Professor of Biology B.A., University of Texas at Austin; Ph.D., Stanford University.
Williams, Sandra L. (2006) ..................................Director, Advising and Evaluations, Enrollment Services
B.A., M.S., University of Nevada, Las Vegas.
Williams, Terry A. (1986) ............................ Lecturer in Rhetoric and Writing Studies B.A., College of Wooster; M.A., San Diego State University.
Wilson, Leslie A. (2001) ................Therapist, Counseling and Psychological Services B.A., San Diego State University; Ph.D., California School of Professional Psychology, San Diego.
Winslow, Luke A. (2014) $\qquad$ . Assistant Professor of Communication B.A., Azusa Pacific University; M.A. California State University, Fullerton; Ph.D., University of Texas, Austin.
Wolkowicz, Roland (2006).. $\qquad$ Associate Professor of Biology B.S., M.S., Tel Aviv University, Israel; Ph.D., Weizmann Institute of Science, Israel.

Wong, Paul (2003) ......... Dean, College of Arts and Letters; Professor of Sociology B.A., M.A., Ph.D., University of California, Berkeley.

Wood, J. Luke (2011) $\qquad$ Associate Professor of Administration Rehabilitation and Postsecondary Education
B.A., M.A., California State University, Sacramento; Ph.D., Arizona State University.

Woodruff, Susan (2008) $\qquad$ Professor of Social Work
B.A., University of Texas at El Paso; M.A., San Diego State University; Ph.D., San Diego State University and University of California, San Diego.
Wu, Ruey-Jiuan Regina (1999) $\qquad$ ...Associate Professor of Linguistics and Asian/Middle Eastern Languages
B.A., National Taiwan Normal University; M.A., University of Washington; Ph.D., University of California, Los Angeles.
Xie, Tao (2006) $\qquad$ .Associate Professor of Computer Science B.E., Anhui Institute of Technology; M.E., Hefei University of Technology; Ph.D., New Mexico Institute of Mining and Technology.
Yang, Yeongling Helio (1988) ...........Professor of Management Information Systems B.A., Cheng-Kung University, Taiwan; M.S., Ph.D., University of Florida.

Yapelli, Tina Marie (1985).............................................. Professor of Art and Design B.A., Loyola Marymount University; M.A., California State University, Fullerton.

Yeager, Bill (1985)....................................................................... Professor of Music B.M., M.M., North Texas State University.

Yeh, Chiou-Ling (2002) $\qquad$ .. Associate Professor of History B.A., National Chengchi University; M.A., Michigan State University; Ph.D., University of California, Irvine.
Yeh, May (2001) ......................................................Associate Professor of Psychology B.A., M.A., Ph.D., University of California, Los Angeles.

Yu, Elena S.H. (1990). $\qquad$ ...Professor of Public Health M.S., University of Notre Dame; M.P.H., Columbia University in the City of New York; Ph.D., University of Notre Dame.
Zahner, William (2014)................................................... B.A., Boston College; M.A., Ph.D., University of California, Santa Cruz.

Zayas, Ricardo (2008).................................................... Associate Professor of Biology B.S., Fairfield University; Ph.D., Tufts University.

Zeller, Robert W. (2001). $\qquad$ . Professor of Biology B.A., Boston University; Ph.D., California Institute of Technology.

Zhang, Sheldon X. (2002). $\qquad$ Professor of Sociology B.A., Sichuan University, China; M.A., Ph.D., University of Southern California.

Zhang, Zheng-sheng (1990) $\qquad$ ..Professor of Chinese B.A., Beijing Teacher's College, Peoples Republic of China; M.A., Ph.D., The Ohio State University.
Zheng, Congcong (2005). $\qquad$ ... Associate Professor of Management
B.E., University of International Business and Economics, Beijing; Ph.D., University of London.

Zhong, Mei (1999) ..................Associate Professor of Journalism and Media Studies B.A., University of Guam; M.A., Southern Illinois University; Ph.D., Kent State University.


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## Emeritus Faculty

Day, Thomas B., Ph.D., President (1978-1996) $\qquad$ Professor of Physics Golding, Brage, Ph.D., President (1972-1977) ...........Professor of Chemistry and Engineering Weber, Stephen L., Ph.D., President (1996-2011) ..............................Professor of Philosophy Abbott, Mitchel T., Ph.D. (1964-1992) $\qquad$ ..Professor of Chemistry Abbott, Patrick L., Ph.D. (1971-2003) ................................ Professor of Geological Sciences Abut, Hüseyin, Ph.D. (1981-2001) .................Professor of Electrical and Computer Engineering Ackerly, Jr., Robert S., Ed.D. (1963-1990) ............ Counselor of the University Advising Center; Professor of Teacher Education
Adams, Elsie B., Ph.D. (1971-1994) ................Professor of English and Comparative Literature Adler, Renatte K., Ph.D. (1982-2009) $\qquad$ Professor of Economics
Aguado, Edward, Ph.D. (1982-2012) .............................................. Professor of Geography Ajemian, James A., Ph.D. (1970-1998).............................. Assistant Professor of Social Work Alexander, James V., Ph.D. (1967-1984)...................................Associate Professor of Botany
Alfred, Lawrence J., Ph.D. (1994-2000)... $\qquad$ Professor of Biology
Alger, Christianna (2002-2012) $\qquad$ .Associate Professor of Teacher Education Allison, Alida L., Ph.D. (1990-2012) $\qquad$ Professor of English and Comparative Literature Allen, Barbara E., M.A. (1969-2001, except S’70)..............Assistant Dean for Student Affairs, College of Education
Allen, Brockenbrough S., Ph.D. (1982-2008)................... Professor of Educational Technology Allen, Elizabeth J., Ph.D. (1971-2004) ..Professor of Speech, Language, and Hearing Sciences Almond, Frank W., Ph.D. (1968-2003)..................................................... Professor of Music Anantha, Kasi, Ph.D. (1981-2004)................................................. Professor of Computer Science Andersen, Janis F., Ed.D. (1981-2007)......................................Professor of Communication Andersen, Peter A., Ph.D. (1981-2010, except 1983-85)............. Professor of Communication Anderson, Bonnie M., Ph.D. (1988-2011) ..................Assistant Dean, Undergraduate Studies; Lecturer in Theatre, Television, and Film
Anderson, Hayes L., Ph.D. (1966-2001).......... Associate Dean, College of Professional Studies and Fine Arts; Professor of Communication
Anderson, James T., Ph.D. (1987-2014) $\qquad$ ... Lecturer in Philosophy
Andrain, Charles F., Ph.D. (1964-1998) $\qquad$ Professor of Political Science [Senate Distinguished Professor]
Angelelli, Claudia V., Ph.D. (2001-2014).........................................................essor of Spanish Angione, Ronald J., Ph.D. (1969-2004) $\qquad$ Professor of Astronomy
Annas, Alicia M., M.F.A. (1970-2000). $\qquad$ ........................................................................................................Assisstant Profesor of Theatre Apple, L. Eugene, Ph.D. (1985-1991) ............................................ssistant Professor of Marketing Archibald, J. David, Ph.D. (1983-2011) .........................................................Professor of Biology Atchison, Thomas J., Ph.D. (1965-1992) ........................................ Professor of Management Atkins, Bobbie J., Ph.D. (1989-2005)............... Professor of Administration, Rehabilitation and Postsecondary Education
Atkins, Michael D., Ph.D. (1970-1992).......................................................... Professor of Biology Aufsesser, Peter M., Ph.D. (1975-2010)............ Professor of Exercise and Nutritional Sciences Avila, Vernon L., Ph.D. (1973-2003) ............................................. Associate Professor of Biology
Ayala, Reynaldo, Ph.D. (1969-1996) ...............Professor of Geography, Imperial Valley Campus Baase-Mayers, Sara, Ph.D. (1972-2000) ... Professor of Mathematical and Computer Sciences Babilot, George, Ph.D. (1956-1991) . $\qquad$ ....Professor of Economics
Bailey, Gerald D., Ed.D. (1964-1992) $\qquad$ Professor of Industrial Technology
Bailey, Greg W., Ed.D. (1982-2002).. Assistant Dean for Student Affairs, College of Engineering; Associate Professor of Electrical and Computer Engineering
Baily, Kamilla U., M.S.W. (1966-1977)............................... Associate Professor of Social Work Baker, William E., Ph.D. (2001-2010)............................................... Professor of Marketing Balkwell, Carolyn K., Ph.D. (1981-2007) ..............Professor of Child and Family Development Ball, Joseph W. (1975-2013)...........Albert W. Johnson Distinguished Professor of Anthropology Ballesteros, David, Ph.D. (1983-1998)..........................................an, Imperial Valley Campus Banks, James H., Ph.D. (1976-2009)............................... Professor of Civil, Construction, and Environmental Engineering
Barber, William F., Ph.D. (1959-1991). $\qquad$ College of Business Administration; Professor of Marketing

Barckley, Robert E., Ph.D. (1955-1985)
..Professor of Economics
Bar-Lev, Zev, Ph.D. (1979-2006).. $\qquad$ Barnett, Andrew H., Ph.D. (1983-2005)
5) ............................................... ..Professor of Accountancy
Barnett, Carol A., Ph.D. (1971-2000)... $\qquad$ ... Professor of Biology
Baron, Lawrence, Ph.D. (1988-2012)............. The Nasatir Professor of Modern Jewish History; Professor of History
Barra, Donald P., Ed.D. (1983-2000)...................................................... Professor of Music Barrera, Ernesto M., Ph.D. (1969-1999)............................................... Professor of Spanish Bart, Kenneth J., M.D. (1998-2004) . $\qquad$ Professor of Public Health Bartholomew, Jr., Francis M., 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).................................................... Professor of Biology
Beatty, James R., Ph.D. (1973-2013)...............Professor of Management Information Systems [Senate Distinguished Professor]
Bedore, Robert L., M.S.M.E., Professional Degree in Mechanical Engineering (1959-1992).

Professor of Mechanical Engineering
Bee, Clifford P., Ph.D. (1969-2000) ......................................................essor of Teacher Education
Belasco, James A., Ph.D. (1971-2000) ............................................... Professor of Management
Bender, Stephen J., H.S.D. (1970-2004) .. Professor of Public Health
Bennett, Larry E., Ph.D. (1970-2000) ..

| 4) ... |
| :---: | ....Professor of Chemistry

Benson, Jackson J., Ph.D. (1966-1997)......................................................... Professor of English
Berg, Marlowe J., Ph.D. (1970-2003)..................................... Professor of Teacher Education
Berg, Robert V., M.F.A. (1963-1992)............................................................ Professor of Art
Bertine, Kathe K., Ph.D. (1973-2000) .................................. Professor of Geological Sciences Beshgetoor, Donna L. (1996-2013).... Associate Professor of Exercise and Nutritional Sciences Biggs, Millard R., Ph.D. (1958-1986).. $\qquad$ .. Professor of Music
Block, Russell L., J.D. (1969-2004). $\qquad$ Associate Professor of Finance
Bloomberg, Jr., Warner, Ph.D. (1973-1989) ...................................................essor of Sociology
Blue, Carroll Parrott, M.F.A. (1984-2004)..................Professor of Theatre, Television, and Film
Boddy, Raford D., Ph.D. (1980-2004) .. $\qquad$ ....Professor of Economics
Boe, Alfred F., Ph.D. (1968-2003) ....Associate Professor of English and Comparative Literature
Boggs, Wilma T., M.S. (1971-1977).................................Assistant Professor of Family Studies and Consumer Sciences
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).. $\qquad$ . Professor of Finance
Botkin, Patricia T., Ed.D. (1969-1988)......................Associate Professor of Teacher Education
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 Brodshatzer, Arthur, D.B.A. (1956-1986) .........................................Professor of Accountancy Broom, Betty L., Ph.D. (1979-2003, except F'85-S'86)............Associate Professor of Nursing
Broom, Glen M., Ph.D. (1979-2003)...................................................
Brown, Lee, Ph.D. (1978-1994) ...................................................... Professor of Journalism
Brown, Ruth M. C., Ph.D. (1971-1986) .................................... Associate Professor of English and Comparative Literature
Bruderer, Conrad, D.M. (1963-1996) ... Professor of Music
Bryson, Jeff B., Ph.D. (1970-2004).................................................Professor of Psychology
Buck, Robert E., Ph.D. (1969-2005) .....................................Associate Professor of Sociology
Buckalew, James K., Ph.D. (1967-1999) . $\qquad$ .Professor of Communication
Bumpus, Jerry D., M.F.A. (1971-1996)..... Professor of English [Senate Distinguished Professor]
Burdick, David L., Ph.D. (1968-1995)............... Associate Professor of Mathematical Sciences

Burgess, William C., Ed.D. (1961-1992)...................................... Professor of Health Science
Burnett, Lowell J., Ph.D. (1972-2001).................................................................essor of Physics Burnside, Houston M., Ph.D. (1968-1991) ................................Professor of Teacher Education Butler, David H., Ph.D. (1981-2002) ...........................................................essor of Accountancy Butler, Gerald J., Ph.D. (1968-2005) ..................................................... Professor of English
Butler, Harry, Ph.D. (1975-1990) .................................................................essor of Social Work
Butler, Mark C., Ph.D. (1981-2002) ..........................................................essor of Management
Calavita, Nico, Ph.D. (1980-2004) ........... Professor of Public Administration and Urban Studies Capettini, Robert J., Ph.D. (1985-2007).......................................... Professor of Accountancy
 Cargille, Douglas A., M.A., M.L.S. (1978-2001)..................................................... Librarian
Carlson, David H., Ph.D. (1982-2002) .......................................................essor of Mathematics

Carmichael, Nancy M., Ph.D. (1968-1995) ................................Assistant Professor of Biology
Carpenter, Roger E., Ph.D. (1963-1993)................................................. Professor of Biology
Carrilio, Terry E., Ph.D. (2002-2007) ................................ Assistant Professor of Social Work
Carter, J.E. Lindsay, Ph.D. (1962-1992) ................................. Professor of Physical Education

Castro (Castillo), Susana D., Ph.D. (1985-1994) ..................................... Professor of Spanish
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) .................................................... Professor of Music
Chambers, Norman E., Ph.D. (1972-2001)............................... Professor of Africana Studies
Chandler, Shelly E., Ph.D. (1966-2003) .................................Associate Professor of Sociology
Chang, Albert, M.D. (1991-2007) ..................................................Professor of Public Health
Chang, Ching-Ten, Ph.D. (1979-2004) ..........Professor of Electrical and Computer Engineering
Chang, Howard H., Ph.D., Professional Degree in Civil and Environmental Engineering
(1967-2003)............................................Professor of Civil and Environmental Engineering
Charles, Carol M., Ph.D. (1961-1988) ......................................Professor of Teacher Education
Chatfield, Dale A., Ph.D. (1978-2012)..................................Associate Professor of Chemistry and Biochemistry
Cheek, William F., Ph.D. (1968-2004).................................................................
Chen, Lo-chai, Ph.D. (1969-2001) ........................................................ 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) .................................................. Professor of Finance
Chin, Marilyn M., M.F.A. (1987-2013) .............Professor of English and Comparative Literature Choi, Soonja, Ph.D. (1987-2012) ........................................................Professor of Linguistics
Chou, Fang-Hui, Ph.D., Professional Degree in Civil and Environmental Engineering
(1969-2003)................................................fessor of Civil and Environmental Engineering
Chow, Chee W., Ph.D. (1984-2005).............................................................essor of Accountancy
Christensen, C. Ben, Ph.D. (1968-2000) ..........................................................esessor of Spanish
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). $\qquad$ Professor of History
Clapp, James A., Ph.D. (1968-2001) ....... Professor of Public Administration and Urban Studies
Clark, Mary E., Ph.D. (1969-1986)........................................................................
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
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).....................................................................essor of Biology
Colwill, Elizabeth A. (1989-2012) ..................Associate Professor of Women's Studies
Conly, John F., Ph.D. (1962-2003) .....................................Professor of Aerospace Engineering and Engineering Mechanics
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 Cornejo, Ricardo J., Ph.D. (1978-2009) ...................................Professor of Teacher Education Cornwell, JoAnne, Ph.D. (1984-2010)......... Associate Professor of French and Africana Studies Cottrell, Ann B., Ph.D. (1967-1999) ...........................................................ofessor of Sociology

Cottrell, Don M., Ph.D. (1967-1998) ..................................................................
Cox, George W., Ph.D. (1962-1996) ......................................................... Professor of Biology
Cox, Thomas J., Ph.D. (1975-2000)....................................................................
Cox, Thomas R., Ph.D. (1967-1996) ....................................................................essor of History
Craig, George T., Ph.D. (1968-2001)..................................Professor of Mechanical Engineering
Crisley, Cornelius J., M.L.S. (1962-1990) .................................................
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, A. Stephen, Ph.D. (1972-2006) .................... Professor of Chemistry and Biochemistry Darley, Richard D., Ph.D. (1961-1980) .........................................................essor of Marketing Daub, Jr., Clarence T., Ph.D. (1967-1999) ...........................................Professor of Astronomy
Davies, Darlene G., Ed.S. (1976-1994)........... Assistant Professor of Communicative Disorders
Davies, Jr., Thomas M., Ph.D. (1968-2001) ................................................. Professor of History
Davis, II, Glover T., M.F.A. (1966-2004)................................................... Professor of English
Davis, Inger P., Ph.D. (1977-1996).................................................. Professor of Social Work
Dean, Alfred, Ph.D. (1985-2000)..................................................... Professor of Social Work
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
Dexter, Deborah M., Ph.D. (1967-2001) .. $\ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . e s s o r ~ o f ~ B i o l o g y ~$
Dharmarajan, Sangiah Nadar, Ph.D. (1960-1997)..............Professor of Aerospace Engineering and Engineering Mechanics
Dicken, Charles F., Ph.D. (1962-1995) .........................................................essor of Psychology
Dickerson, Mary E., Ph.D. (1967-1990)..........................Assistant Professor of Family Studies and Consumer Sciences
Dickinson, Fidelia R., Ph.D. (1966-1990)............................................................. Librarian
Diehl, William P., Ph.D. (1968-1997) ..................................... Associate Professor of Biology
Dillon (Salerno), M. Constance, M.S. (1964-1992)................................. Professor of Nursing
Dintrone, Charles V., M.A., M.L.S. (1972-2005)................................................................ Librarian
Dintrone, Patricia N.L., Ph.D. (1989-2006) ........................Assistant Dean for Student Affairs,
College of Business Administration; Lecturer in Management
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
Dominguez, Jesus Y., M.F.A. (1976-2002) ...................Professor of Art, Design, and Art History

Donald, John D., Ph.D. (1978-2004)....................................... Professor of Computer Science
Doorlag, Donald H., Ph.D. (1970-1998).. $\qquad$ ...Professor of Special Education
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) ... $\qquad$ ... Professor of Biology
Downey, Carolyn J., Ph.D. (1988-2004) ............. Associate Professor of Educational Leadership
Downing, Christine R., Ph.D. (1974-1992).
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
DuFault, David V., Ph.D. (1962-1999)........................................Associate Professor of History
Dukas, Vytas, Ph.D. (1959-1988) ... Professor of Russian
Dumlao, Gerald C., M.F.A. (1977-1998)......................................... 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. (1993-2010) .. Associate Dean for Academic Affairs,
Imperial Valley Campus; Professor of Psychology, Imperial Valley Campus
Dunn, Ross E., Ph.D. (1968-2003) ....................................................................................
Easton, George K., Ph.D. (1987-2011) ............................................Professor of Management
Information Systems
Ebert, Thomas A., Ph.D. (1969-1999)... ... Professor of Biology
Ehrlich, Sanford B., Ph.D. (1986-2011)........................... Associate Professor of Management
Eisemann, Kurt, Ph.D. (1982-1992)................................ Professor of Mathematical Sciences
Eisner, Robert E., Ph.D. (1970-2003).............................Professor of Classics and Humanities
..Professor of Classics and Humanities

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El-Assal, Mohamed M.E., Ph.D. (1967-1992)
...Professor of Sociology Elder, John P., Ph.D. (1984-2013)..... Albert W. Johnson Distinguished Professor of Public Health Elgin, Suzette, Ph.D. (1972-1981) ......................................Associate Professor of Linguistics Elliott, Rosalie C., Ph.D. (1968-1982)....................................... Elwin, John D., Ph.D. (1969-2004) .................................................. Professor of Mathematics
 Erickson, Paul, Ed.D. (1963-1986)..........................................Professor of Teacher Education
Espin, Olivia M., Ph.D. (1990-2002).. $\qquad$ .Professor of Women's Studies
Espinosa, Ruben W., Ph.D. (1978-2010) . Professor of Policy Studies in Language and Cross-Cultural Education
Esser, Janet B., Ph.D. (1975-1999) $\qquad$ . Professor of Art
Estes, Russell G., Ed.D. (1963-1992) .. Professor of Music
Etheridge, Richard E., Ph.D. (1961-1992)....................................................................
Etzel, Paul B., Ph.D. (1986-2010) .............. Professor of Astronomy; Director of the Mt. Laguna Observatory
Fairlie, Lyndelle, Ph.D. (1973-2010)........................... Associate Professor of Political Science Farber, Gerald H., Ph.D. (1968-2004) ..............Professor of English and Comparative Literature Fatemi, Khosrow, Ph.D. (1998-2004) .............................................Dean, Imperial Valley Campus; Professor of Management, Imperial Valley Campus
Fearn, Leif, Ed.D. (1967-2009) ..........................................................essor 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)..................................................................... Fetzer, Leland A., Ph.D. (1966-1992).................................................... Professor of Russian Fikes, Robert, Jr., M.A., M.A.L.S. (1977-2012)........................................................ Librarian
Filner, Robert E., Ph.D. (1970-1992).........................................Associate Professor of History Fisch, Arline M., M.A. (1961-1996) ................Professor of Art [Senate Distinguished Professor] Fisher, Kathleen M., Ph.D. (1988-2004) .................................................. Professor of Biology 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 Forman, Robert B., Ed.D. (1963-1985)................................................................ Professor of Music Francis, Peter R., Ph.D. (1981-2003).................Professor of Exercise and Nutritional Sciences

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) ....................................................
Freitas, Lorraine, Ph.D. (1984-2004)......................................Associate Professor of Nursing
Frey, Leonard H., Ph.D. (1956-1989) ...........................................................essor of Linguistics
Frey, Terrence G., Ph.D. (1986-2011)......................................................Professor of Biology
Friedman, Abraham M., Ph.D. (1963-1983)............. Associate Professor of Physical Education
Frost, Christopher J., Ph.D. (2006-2011).................... Associate Dean, Undergraduate Studies; Professor of Religious Studies
Futch, David G., Ph.D. (1967-1998)..........................................Associate Professor of Biology Gamble, Lynn H., Ph.D. (1997-2009) ............................................. Professor of Anthropology Ganster, Paul, Ph.D. (1984-2011) ...........Director, Field Stations Program, Director, Institute for Regional Studies of the Californias; Professor of History
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 Gay, Phillip T., Ph.D. (1976-2007)...................................................................essor of Sociology Gazell, James A., Ph.D. (1968-2008)..............................................Professor of Public Affairs Gefter, Irving, Ph.D. (1970-1992)...............................Assistant Professor of Religious Studies Gega, Peter C., Ed.D. (1955-1987).......................................... Professor of Teacher Education Genovese, E. Nicholas, Ph.D. (1970-2003) .......................Professor of Classics and Humanities
Genzlinger, Cleve K., M.M. (1957-1991) .. Professor of Music
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 Ghilbert, Jeanne S., M.A. (1965-1982)..........................................Assistant Professor of French Gibson, Rich, Ph.D. (2000-2006) .............................Associate Professor of Teacher Education Gifford, Adam, Ph.D. (1954-1989) .................................................................. Gilbreath, Stuart H., Ph.D. (1968-2003) .. Professor of Public Administration and Urban Studies Gillette, Thomas L., Ph.D. (1961-1989).........................................................essor of Sociology Gitchoff, G. Thomas, D.Crim. (1969-2001).............................Professor of Public Administration and Urban Studies
Gitman, Lawrence J., Ph.D. (1989-2004).............................................. Professor of Finance
Goldberg, Fred M., Ph.D. (1986-2012) ..................................................................essor of Physics
Goodson, Roger A., Ed.D. (1968-1988) ..........................................
Goodwin, Joann P., M.L.S. (1968-1991).............................................Senior Assistant Librarian
Gottlieb, Roberta A., M.D. (2007-2013)...............................................................essor of Biology
Goyne, Carol L., M.A., M.S.L.S. (1969-2002)............................................. Associate Librarian
Graf, Richard G., Ph.D. (1968-2008)..............................................................essor of Psychology
Graham, William K., Ph.D. (1973-2003) ......................................................essor of Psychology
Green, Louis C., Ph.D. (1976-2003) ..............................................................essor of Economics
Greenfeld, Philip J., Ph.D. (1969-2005) .......................................... 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

Grubbs, Edward J., Ph.D. (1961-1997) ...
........................................................ ...Professor of Chemistry
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)...........................................................essor of Marketing
Hager, Richard A., Ph.D. (1967-2000) ........ Professor of Mathematical and Computer Sciences
Hale, E. Alan, Ph.D. (1957-1987) .
..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)........................................... ${ }^{\text {Professor of Management }}$
Hanchett, William F., Ph.D. (1956-1987) ................................................................essor of History
Hanscom, III, Zac, Ph.D. (1978-2002) ...................................... Associate Professor of Biology
Hanson, Robert F., Rec.D. (1962-1983)...............................................Professor of Recreation

Harkányi, Katalin, M.L.S. (1969-2003)....................................................................... Librarian
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) .
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) ..............................................................
Harvey, Michael L., Ph.D. (1969-2001) .........................................................Professor of Theatre
Hatch, Richard A., Ph.D. (1975-2000) .............. Professor of Information and Decision Systems
Hatton, Diane C., D.N.Sc. (2007-2012) ........................................................ Professor of Nursing

Hawley, Peggy J., Ph.D. (1968-1988) $\qquad$ Professor of Counselor Education Hayhurst, David T., Ph.D. (2002-2014)............ Dean, College of Engineering; Professor of Civil, Construction, and Environmental Engineering
Haworth, Glenn O., D.S.W. (1966-1987) $\qquad$ 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 Psychological Services Heck, Edward V., Ph.D. (1983-2009). $\qquad$ . Professor of Political Science Heighton, Elizabeth J., M.S. (1966-1992) .............. Professor of Telecommunications and Film Heineken, Janet R., Ph.D. (1980-2007)..........................................................essor of Nursing Heinrichs, Waldo, Ph.D. (1991-1996) .Professor of History
Hellberg, Lars H., Ph.D. (1956-1992).............................................................. 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). $\qquad$ .Professor of Biology Hempel, Graham, M.A. (1979-2010) $\qquad$ .Associate Professor of Dance
Henderson, Joel H., Ph.D. (1971-2000)... Professor of Public Administration and Urban Studies Henry, Edward O., Ph.D. (1974-2004).......................................................
Hergert, Michael L., Ph.D. (1985-2010) ...................................................essor of Management Heyman, Neil M., Ph.D. (1969-2002) ................................................................fessor of History Hidalgo, Margarita G., Ph.D. (1987-2008) ............................................. Professor of Spanish Hill, Jr., Richard B., Ph.D. (1969-1999) ..................................Assistant Professor of Sociology, Imperial Valley Campus
Hill, Wayne O., Ed.D. (1955-1983). $\qquad$ ..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) .............. Associate Professor of 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

## Hogg, Merle E., Ph.D. (1962-1992).

$\qquad$ .. Professor of Music
Hohm, Charles F., Ph.D. (1973-2004).. Professor of Sociology
Hoidal, Oddvar K., Ph.D. (1967-2003) ..................................................................
Holler, Linda D., Ph.D. (1981-2010) ....................... Associate Dean, College of Arts 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
Hough, Richard L., Ph.D. (1983-2001) ..... ...Professor of Sociology
Houston, Jr., Arthur L., 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 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)..................................................essor 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 Hunrichs, William A., Ph.D. (1957-1985) ...........................................Professor of Psychology
Hunsaker, II, Don, Ph.D. (1960-1996)................................................................
Hunter, Lawrence B., M.A. (1963-1989)................................................................... Professor of Art
Huntley, David, Ph.D. (1978-2005) ............................................. Professor of Geological Sciences
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)...............................................................Professor of Sociology Impelluso, Thomas J., Ph.D. (1998-2013) .. ) ......................... Professor of Mechanical Engineering ingmanson, Dale E., Ed.D. (1968-1999) losupovici, Alexander, Ph.D. (1978-2001) ....Professor of Electrical and Computer Engineering Irgang, Frank J., Ph.D. (1956-1982)...................................................essor of Industrial Studies Ishikawa, Wesley H., D.S.W. (1969-1988)... .... Professor of Social Work

Jackson, Elizabeth R., Doctorat (1969-1986) ..Professor of French Jacobs, L. Ron, Ph.D. (1982-2005) $\qquad$ ... Professor of Administration,
Rehabilitation and Postsecondary Education [Senate Distinguished Professor]
Jeffcoat, Kendra A., Ph.D. (2008-2015) ............ Professor of Administration, Rehabilitation and Postsecondary Education
Jensen, Reilly C., Ph.D. (1958-1992).................................................................
Jiménez-Vera, Arturo, Ph.D. (1970-1992) .................................................. Professor of Spanish
Jiracek, George R., Ph.D. (1980-2004) ............................... Professor of Geological Sciences
Johns, Ann M., Ph.D. (1975-2002) ................Professor of Rhetoric and Writing Studies [Senate Distinguished Professor] and Linguistics
Johns, David H., Ph.D. (1965-2001) ......................................... Professor of Political Science
Johns, Gerald E., M.S.L.S. (1967-1986) ................................................. Associate Librarian
Johnson, Albert W., Ph.D. (1964-1991)............................Vice President for Academic Affairs;
Professor of Biology
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)....................................................................... 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) ............................................
Jones, Walter D., Ph.D. (1962-1991) .............................................................essor of Chemistry

Jordan, Jr., G. Ray, Ph.D. (1966-1987) .......................................Professor of Religious Studies
Joseph, Lionel, Ph.D. (1947-1971)...............................................................essor 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
Kahn, Marion J., M.S. (1967-1983) .......................................................... Professor of Social Work
Karen, Robert L., Ph.D. (1964-1985) ...........................................................essor of Psychology
Kartalija, Michael A. (1976-2013).................................................... Professor of Marketing
Kartman, Arthur E., Ph.D. (1968-2005) ...............................................Professor of Economics
Kass, Norman, Ph.D. (1961-1997)..............................................................................................
Keen, Elmer A., Ph.D. (1967-1989)..............................................................essor of Geography
Kehler, Dorothea F., Ph.D. (1970-2001).................................................. Professor of English
Keiser, K. Robert, Ph.D. (1968-2004).......................... Associate Professor of Political Science
Kelley, Joseph B., D.S.W. (Under contract 1968-1969; 1970-1998).. Professor of Social Work Kelly, Beatrice L., Ph.D. (1967-1983) ...............................................Professor of Microbiology
Kelly, Patricia R., Ph.D. (1999-2009) .............................................. Professor of Teacher Education
Kendall, W. Lloyd, Ed.D. (1961-1992) ........................................ Professor of Teacher Education
Kern, J. Philip, Ph.D. (1968-1994) ....................................... Professor of Geological Sciences
Khali, 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
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
Kitchen, James D., Ph.D. (1957-1981) .... Professor of Public Administration and Urban Studies
Koch, Alma L., Ph.D. (1983-2013) $\qquad$ Professor of Public Health
Kohen, Janet A., Ph.D. (1980-2001)...........................Associate Professor of Women's Studies
Kolar, Jane M. (1975-2012).........................................................Professor of Music
Kolody, Bohdan, Ph.D. (1972-2008) ...................................................Professor of Sociology
Koolish, Lynda L., Ph.D. (1989-2010) .......... Professor of English and Comparative Literature
Koppman, Jerry W., Ph.D. (1963-1987)...............................................Professor of Psychology
Kornweibel, Jr., Theodore, Ph.D. (1977-2001) ............................ Professor of Africana Studies
Krekorian, Neil, Ph.D. (1970-2001) ................................................................. Professor of Biology

Krisans, Skaidrite, Ph.D. (1969-2002) .....................................................................
Krishnamoorthy, Govindarajalu, Ph.D. (1968-2003)....................................Professor of Civil
and Environmental Engineering
Krummenacher, Daniel, Ph.D. (1968-1988)............................ Professor of Geological Sciences
Kuhlman, Natalie A., Ph.D. (1979-2003) .......................Professor of Policy Studies in Language and Cross-Cultural Education
Kummerow, Jochen, Ph.D., nat. (1973-1990) .......................................... Professor of Biology
Kushner, Howard I., Ph.D. (1980-2002) . .Professor of History

Kuznets, Lois R., Ph.D. (1985-1996)
 . Professor of English
Lackritz, James R., Ph.D. (1977-2010). $\qquad$ ....Associate Dean for Academic Affairs, College of Business Administration; Professor of Management Information Systems
Laiho, Ethel E., M.S. (1964-1982). $\qquad$ ..Associate Professor of Nursing Lamke, Gene G., M.A. (1973-2006) ....................... Professor of Recreation, Parks and Tourism LaMonica, Grace, M.S. (1966-1992) $\qquad$ Landis, Jean, M.S. (1968-1979) . ........ $\ldots . . . . . . . . . . . . . . . . . A$ Assistant Professor of Physical Education Landis, Vincent J., Ph.D. (1954-1997) . $\qquad$ ..Professor of Chemistry Landsverk, John A., Ph.D (1990-2004).................................................... Professor of Social Work Lane, Jo Ann, M.S. (2000-2009)....... (9................ $\qquad$ Lecturer in Computer Science Langenbach, Robert G., Ed.D. (1959-1981) .......................... Professor of Information Systems Lantz, John M., Ph.D. (1986-1998). $\qquad$ Professor of Nursing Lapp, Diane K., Ed.D. (1978-2009) .................... Distinguished Professor of Teacher Education 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
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, Long C. (1982-2012).............................Professor of Electrical and Computer Engineering Lee, Raymond, Ph.D. (1977-1992)....................................Associate Professor of Psychology Lee, Robert E., M.A. (1956-1983) .......................... Professor of Telecommunications and Film Leerhoff, Ruth E., M.A. (1964-1991) ................................................................... Librarian
 Lesley, F. David, Ph.D. (1970-2006)................................................. Professor of Mathematics 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 Lightner, Kevin M., Ph.D. (1968-2004) ...........................................Professor of Accountancy Lilly, Roger A., Ph.D. (1968-2001) ...................................................................essor of Physics Lin, Mao-Shiu, Ph.D. (1966-2002).................Professor of Electrical and Computer Engineering Lindgren, Donald A., Ph.D. (1965-1992) .......................................................essor of Marketing Lippold, Lois K., Ph.D. (1968-2003)............................................... Professor of Anthropology Litrownik, Alan J., Ph.D. (1971-2010).

| 0) |
| :---: | ... Professor of Psychology

## Little, D. Richard, Ph.D. (1974-1995)

....................................... Professor of Political Science
Livingston, Nancy M., Ed.D. (1982-2008) Imperial Valley Campus
Lookinland, Sandra, Ph.D. (1981-2004, except 1997-2002) ................... Professor of Nursing Loveman, Brian E., Ph.D. (1973-2008)...................................Professor of Political Science Loveridge, Catherine E., Ph.D. (1983-2003) .......................................... Professor of Nursing Lujan, Jaime L., Ph.D. (1976-2004).........................Associate Professor of Teacher Education
Lustig, Myron W., Ph.D. (1978-2006) ..
$\qquad$
$\qquad$ .........................Professor of Communication Lutz, Donald A., Ph.D. (1986-2004)...................................................... Professor of Mathematics Lybarger, Alvin E., Ed.D. (1970-1992) .............. Associate Professor of Mechanical Engineering Lynch, Eleanor W., Ph.D. (1979-2003)......................................Professor of Special Education Lynn, Elizabeth, Ph.D. (1963-1988)...................................Associate Professor of Psychology
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
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, Jr., George A., M.S.M.E., Professional Degree in Mechanical Engineering (1968-1994).
d, Ph.D. (1966-1996)
6) ................ A Associate Professor of Mathematical Sciences Marino, Leonard, Ph.D. (1973-2010)............ Professor of Electrical and Computer Engineering Marovac, Nenad, Ph.D. (1980-2003) ......................................Professor of Computer Science Marshak, Celia L., Ph.D. (1973-1993) ...Assistant Dean for Student Affairs, College of Sciences Marshall, C. Monte, Ph.D. (1975-2001)................................ Professor of Geological Sciences Marshall, Sandra P., Ph.D. (1985-2010)......................................................essor of Psychology Marsters, Harold L., M.A. (1962-1992) ................Associate Professor of Industrial Technology

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) $\qquad$ . Professor of Psychology Maruyama, Wendy L., M.F.A. (1989-2010).................. Professor of Art, Design, and Art History Mason, Cheryl 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 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) ................................................ Professor of Public Health McAdams, Henry E., Ph.D. (1966-1992)........... Director, University Advising Center; Counselor McAllister, R. Wayne, M.A. (1966-1983) ............................ Assistant Professor of Educational Technology and Librarianship
McArthur, David S., Ph.D. (1973-2004)..............................................Professor of Geography McCaffery, Lawrence F., Ph.D. (1976-2004) ...Professor of English and Comparative Literature McClard, Q. Donavon, Ph.D. (1966-1986) ..................................Professor of Special Education McCordick, Sharon M., Ph.D. (1969-2001)..........................Associate Professor of Psychology McCormack, Alan J., Ed.D. (1987-2004)................................. Professor of Teacher Education McCoy, Leone D., Ph.D. (1967-1990)............................................ McDean, Harry C., Ph.D. (1971-2003) ........................................................................... McDonald, Roy D., Ph.D. (1963-1992).............................................Professor of Psychology McEowen, R. Harold, Ph.D. (1967-1992)...............Associate Professor of Industrial Technology McFall, John B., Ph.D. (1966-1985)....................................................Professor of Marketing
McFarlane, Fred R., Ph.D. (1972-2008)................. Professor of Administration, Rehabilitation and Postsecondary Education
McGhie, Robert D., Ph.D., Professional Degree in Mechanical Engineering
(1967-1997)...
..Professor of Civil and Environmen McKenzie, Thomas L., Ph.D. (1980-2004) ..........Professor of Exercise and Nutritional Sciences McKerrow, Margaret, Ph.D. (1971-2003)...................Professor of Theatre, Television, and Film McLeod, Dan, Ph.D. (1964-1993) ...................Professor of English and Comparative Literature McLeod, Douglas B., Ph.D. (1972-2001)....................................... Professor of Mathematics McPhail, Martha E., M.S.L.S., M.A. (1988-2010) .................................................. Librarian
McTaggart, Aubrey C., Ph.D. (1962-1992) .................................... Professor of Health Science Meador, Thomas C., M.A. (1966-2001) ........................Associate Professor of Communication Meadows, Eddie S., Ph.D. (1972-2001) ............................................................ Professor of Music Mechikoff, Robert A., Ph.D. (1981-2010)...........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)..................... Professor of Chemistry and Biochemistry Mikitka-Gomez, Kathleen F., Ph.D. (1974-2010) .................... Professor of Teacher Education Miles, E. Walter, Ph.D. (1966-1998)...................................................ofessor of Political Science Miller, Allan W., M.F.A. (1963-2004) ............................ Professor of Art, Design, and Art History Miller, Elise, M.A. (1977-2003) .................................. Lecturer in Rhetoric and Writing Studies Miller, Ralph Llewellyn, Ph.D. (1963-1996) ..... Professor of Counseling and School Psychology Miller, Richard H., Ph.D. (1977-2001) .................................. Professor of Geological Sciences
 Mitton, Daryl G., Ph.D. (1966-1991) .........................................................essor of Management Moaney, Eric R., M.F.A., M.S. (1968-1998)......................................Assistant Professor of Art Moellendorf, Darrel, Ph.D. (2002-2013)...................................................fossor of Philosophy Moffett, Myrna J., Ph.D. (1968-1998) ...................................... Assistant Professor of Nursing Mollenauer, Sandra O., Ph.D. (1970-2003) ........................................... Professor of Psychology 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 Mora, Jill K., Ed.D (1994-2007)............................ Associate Professor of Teacher Education
Moreno, Steve G., Ed.D. (1969-1998) ..............................................

Morey, Ann I., Ph.D. (1985-2003) $\qquad$ Distinguished Research Professor Director, Center for Educational Leadership, Innovation and Policy
Morris, Richard H., Ph.D. (1957-2010). $\qquad$ . Professor of Physics
Morris, Rita I., Ph.D. (1990-2002).................................................Associate Professor of Nursing
Moss, Barbara, Ph.D. (2001-2013)......................................... Professor of Teacher Education
Murphy, Dana W., Ph.D. (1980-2008) ....... Lecturer in Political Science, Imperial Valley Campus
Murphy, Monica A., Ph.D. (1969-1992)...................................Professor of Teacher Education
Murphy, Robert J., Ph.D., Professional Degree in Mechanical Engineering
(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) ...........................................
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, Burt, Ph.D. (1957-1988)...................................Director of the Mt. Laguna Observatory; Professor of Astronomy
Nelson, Hilda B., Ph.D. (1965-1988)......................................................................
Nelson, Kerry A. (1988-2012).................................Professor of Art, Design, and Art History
Nelson, Sherwood M., Ph.D. (1956-1982)..................................................essor of Philosophy
Nelson, Thomas A., Ph.D. (1968-2000).................................................. Professor of English

Neuman, Donald R., Ph.D. (1967-1991)................................................................................
Neumeyer, Peter F., Ph.D. (1978-1993) ........... Professor of English and Comparative Literature
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
Noorany, Iraj, Ph.D., Professional Degree in Civil Engineering
(1963-1997)........................................ Professor of Civil and Environmental Engineering
Norman, Nelson F., Ph.D. (1960-1983) .................................................................
Norman, Ronald J., Ph.D. (1985-2000) ............ Professor of Information and Decision Systems
Noto, James V., H.S.D. (1969-2001) ................................Associate Professor of Public Health
Nower, Leon, Ph.D. (1963-1990)....................... Associate Professor of Mathematical Sciences
Nunn, Melissa, M.A. (1979-2010).............Professor of Dance [Senate Distinguished Professor]
Nye, William A., Ph.D. (1962-1996) ........................................................... Professor of Finance

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
Odendahl, Eric M., Ph.D. (1964-1992).............................................. Professor of Journalism
O'Donnell, Terry L., D.M.A. (1975-2008) ...Professor of Music and Theatre, Television, and Film
Ofield, Jack (1988-2009) .........................................Professor of Theatre, Television, and Film

## Ohnysty, Basil, M.S., Professional Degree in Mechanical Engineering

(1967-1997). Professor of Mechanical Engineering
Omberg, Edward, Ph.D. (1989-2006) Professor of Finance
O'Neal, H. Edward, Ph.D. (1961-1994)... Professor of Chemistry [Senate Distinguished Professor]
Orth, Fredrick J., M.F.A. (1965-2001).......................... Professor of Art, Design, and Art History
Oseroff, Saul B., Ph.D. (1984-2008) ................................................................essor of Physics
0'Shaughnessy, Tam E., Ph.D. (2002-2007) ....................... Associate Professor of Counseling and School Psychology
Pacheco, Richard, Ph.D. (1979-2003).........................Professor of Policy Studies in Language and Cross-Cultural Education
Palmer, Dennis, A.B. (1965-1997) ...................................................Associate Professor of French
Palsson, Gerald D., M.A. (1976-2003) ................................................... Associate Librarian
Panos, Nicholas, M.S.E.E., Professional Degree in Electrical and Computer Engineering (1968-2001)................................................Pofessor of Electrical and Computer Engineering Paolini, Jr., Paul J., Ph.D. (1970-2003)................................................. Professor of Biology
Park, Chong Jin, Ph.D. (1972-1999)........... Professor of Mathematical and Computer Sciences
Parsons, John A., Ph.D. (1965-1990) .................................................... Professor of Biology
Patterson, Patricia (1985-2012)........Professor of Exercise and Nutritional Sciences
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
Perczel, Csilla F., Ph.D. (1970-1990) ............................................. Associate Professor of Art
Perkins, Michael J., M.B.A. (1986-2011).............................................................. Librarian
Perrault, Jacques, Ph.D. (1984-2013).................................................... Professor of Biology

Peterman, Jr., Lewis E., Ph.D. (1978-2005) 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
Phillips, Jr., William H., Ed.D. (1963-1991)............................. Professor of Physical Education
Phleger, Charles F., Ph.D. (1971-2001)
Pierce, Stephen J., Ph.D. (1984-2004). ... Professor of Biology
Professor of Mathematics
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
Platz, Marvin H., Ed.D. (1955-1983)...........................................
Plotnik Rod Ph.D. (1970-1999)
 ...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)........Associate Professor of History, Imperial Valley Campus
Polkinhorn, Harry, Ph.D. (1984-2014).............Professor of English and Comparative Literature
Popp, Dean 0., Ph.D. (1969-2003) ........................ Associate Vice President for Faculty Affairs;
Professor of Economics
Poroy, Ibrahim I., Ph.D. (1967-1987).................................................Professor of Economics
Preston, David L., Ph.D. (1971-2001).............................................................essor of Sociology
Price, Judy M., Ph.D. (1972-2008) ........................................... Associate Professor of Psychology
Pryde, Philip R., Ph.D. (1969-2001)...................................................Professor of Geography
Psomas, Themistocles, Ph.D. (1952-1982)........................Associate Professor of Psychology
Ptacek, Anton D., Ph.D. (1965-1992) .....................Associate Professor of Geological Sciences
Puerto, Cecilia, M.S. (1994-2011)................................................................. Librarian
Quastler, Imre E., Ph.D. (1967-2002).................................................Professor of Geography
Ramage, Jean C., Ph.D. (1975-1989) ....................................Professor of Counselor Education
Rankin, Janna S., J.D. (1986-1994) ....................... Professor of Recreation, Parks and Tourism
Rasmussen, Aaron P., Ph.D. (1971-1980) ...................Associate Professor of Industrial Studies
Ratty, Frank J., Ph.D. (1954-1984) ........................................................... 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)................................................. Professor of Public Affairs
Real, Michael R., Ph.D. (1980-2000) ...................................................
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).. $\qquad$ ...Professor of Psychology
Reel, Jane E., Ph.D. (1958-1991).............................Associate Professor of Teacher Education
Rehfuss, Donald E., Ph.D. (1962-2004)............................................................essor of Physics
Reilly, Thomas, D.P.A. (2008-2014) ....................................................Professor of Social Work
Reid, W. Nick, M.F.A., M.A. (1983-2007).................... Professor of Theatre, Television, and Film
Reilly, Judy S., Ph.D. (1986-2011)................................................. Professor of Psychology
Reints, William W., Ph.D. (1966-1992) ............................................................ Professor of Finance
Richardson, William H., Ph.D. (1963-1994) ..............................................Professor of Chemistry
[Senate Distinguished Professor]
Riedman, Richard M., Ph.D. (1962-1992) .................... Professor of Communicative Disorders
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
Riggs, Dorothy J., Ed.D. (1966-1986)... ... Professor of Teacher Education
Rinehart, Robert R., Ph.D. (1964-1994) ...................................................... Professor of Biology

Ring, Morey A., Ph.D. (1962-1995)..................................................... Professor of Chemistry
Ritchie, Donn C., Ph.D. (1990-2008) ...............................Professor of Educational 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
Roberts, Thomas W., Ph.D. (1999-2012)................Professor of Child and Family Development

Roberts-Fields, Gail C., M.A. (1976-2009)................Professor of Art, Design, and Art History Robinett, E. Jane, 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
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, Stephen B.W., Ph.D. (1968-2010) ............................................... Rogers, Gloria H., M.L.S., M.A. (1985-2003)............................................. Associate Librarian Rogers, John J., M.S. (1963-1996)................................................................... Professor of Art Rogers, II, William N., Ph.D. (1968-2003) ....... Professor of English and Comparative Literature Rohrl, Vivian J., Ph.D. (1965-2001) ............................................... Professor of Anthropology Rollefson, Gary 0., Ph.D. (1984-1992) ........................................... Professor of Anthropology Romano, Albert, Ph.D. (1963-1990) ................................ Professor of Mathematical Sciences Rosenstein, Leon, Ph.D. (1969-2003) ..
$\qquad$
$\qquad$ ..... Professor of Child and Family Development Ross, Helen Warren, Ph.D. (1973-1998) .................. Professor of Child and Family Development
Ross, Pamela J., Ph.D. (1977-2008)............................Pofessor 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).....................................................................essor of Nursing Saba, Farhad, Ph.D. (1984-2009).................................. Professor of Educational Technology Sabbadini, Roger A., Ph.D. (1977-2008)...................................................... Professor of Biology Sacco, Steven J., Ph.D. (1997-2014) .................................................... Professor of French Saccuzzo, Dennis P., Ph.D., J.D. (1975-2011) .................................... Professor of Psychology Sachdeva, Kanwal S., D.B.A. (1976-2004).................................Associate Professor of Finance Sallis, James F., Jr., Ph.D. (1983-2012) ... Albert W. Johnson 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., Certified Public Accountant
(1973-2000).
$\qquad$ ...Professor of Accountancy Sandback, Patricia R., M.F.A. (1974-2010)...................................................... Professor of Dance
Sanderlin, George W., Ph.D. (1954-1983) ... Professor of English [Senate Distinguished Professor] and Comparative Literature
Sanders, Frederick C., Ph.D. (1967-1981) ........Associate Professor of Speech Communication Sandlin, Joann S., Ph.D. (1967-1994).........................................................essor of Sociology Sardinas, Maria A., M.T., M.S.W. (1968-1989)................... Associate Professor of Social Work Sattler, Jerome M., Ph.D. (1965-1994).............................................Professor of Psychology Savvas, Minas, Ph.D. (1968-2001)................. Professor of English and Comparative Literature Scheck, Dennis C., Ph.D. (1968-2001)............................................................essor of Sociology
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)..........................................................essor 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) .................................................Pofessor of Women's Studies Scott, Carole A., Ph.D. (1969-2001) ............Dean, Undergraduate Studies; Professor of English Scott, Thomas R., Ph.D. (2000-2013)............................... Vice President for Research and Dean, Graduate Division; Professor of Psychology
Scutchfield, F. Douglas, M.D. (1980-1997) ..................................... Professor of Public Health Sebold, Frederick D., Ph.D. (1969-1987) .........................................................essor of Economics Segade, Gustavo V., Ph.D. (1967-2000) ............................................................fessor of Spanish Segal, Evalyn F., Ph.D. (1973-1983) ............................................................essor of Psychology 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) ...................................... Professor of Public Health Senour, Maria Nieto, Ph.D. (1977-2009) ......................................... Professor of Counseling
and School Psychology [Senate Distinguished Professor] and School Psychology [Senate Distinguished Professor]
Seright, Orin D., Ph.D. (1967-1997) ....................................Associate Professor of Linguistics
Settle, Robert B., Ph.D. (1972-1988) ............................................................essor of Marketing

Sevier, E. Dale (2000-2013) ...Professor of Regulatory Affairs
Shackelford, Gordon L., M.S. (1975-2004) ...Lecturer in Physics
Sharabi, M. Nazmi, Ph.D. (1981-2004)........................................Associate Professor of Civil 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)..................................................................... ${ }^{-} . .$.
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
 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).............................................................essor of Physics Shore, Lynn M., Ph.D. (2004-2013) ............................................................essor of Management
Short, Jr., Donald R., Ph.D. (1969-2001) .... Professor of Mathematical and Computer Sciences Short, James L., Ph.D. (1973-2003) ..................................................... Professor of Finance
Shutts, William H., Ph.D. (1958-1977) .............................Professor of Aerospace Engineering
Siman, Alan E., Ph.D. (1974-2002)................................... Associate Professor of Social Work
Simmons, Roger W., Ph.D. (1976-2011) ............ Professor of Exercise and Nutritional Sciences
Singer, Ethan A., Ph.D. (1979-2013)................... Associate Vice President for Academic Affairs; Professor of Business Administration and Public Affairs
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).....................Professor of Exercise and Nutritional Sciences and Health Science
Slymen, Donald J., Ph.D. (1988-2011).. $\qquad$ Professor
Smith, Jr., Charles D., Ph.D. (1967-1992) ..Professor of History
Smith, Jane K., Ph.D. (1968-2009, except 1970)............Assistant Vice President for Academic Services, Academic Affairs
Smith, Linda D., Ph.D. (1996-2013)...............Therapist, Counseling and Psychological Services Smith, Newton B., Ph.D. (1954-1986) .............................. Professor of Mathematical Sciences Smith, Jr., Ray T., Ph.D. (1964-1996) ....................................................................
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)............................................ Professor of Mathematics
Sparks, Irving Alan, Ph.D. (1974-1999) ...........................................fessor of Religious Studies Sparrow, Glen W., Ph.D. (1980-2001)...... Professor of Public Administration and Urban Studies Spaulding, Jr., William E., Ph.D. (1970-1985)...................... Professor of Information Systems Spevak, Joseph E., Ph.D. (1969-2006).........................Assistant Professor of Communication Spindler, Audrey A., Ph.D. (1977-2007) ........... Professor of Exercise and Nutritional Sciences Spinetta, John J., Ph.D. (1972-2003) ....Professor of Psychology [Senate Distinguished Professor] Stanford, E. Percil, Ph.D. (1973-2001) ... Albert W. Johnson Distinguished Professor of Social Work

Stauffer, Thomas David, M.A. (1984-2008) .................................................Professor of Music Stautland, Sigurd, Ph.D. (1966-1991).....................................Professor of Teacher Education
Steen, Paul J., M.A. (1970-1992).......................... Professor of Telecommunications and Film; Director of University Telecommunications
Steinberg, Dan, Ph.D. (1989-1998) ....................................Associate Professor of Economics Stephenson, Clarence E., Ph.D. (1963-1991) ............................................... Professor of Drama
Stephenson, III, John S., Ph.D. (1969-1986)...................................................essor of Sociology
Sterk, William E., Ph.D. (1978-2011) ....................................................Professor of Finance
Stevens, Larry P., Ed.D. (1986-1991).............................. Assistant Professor of Administration, Rehabilitation and Postsecondary Education
Stevens, Walter R., Ph.D. (1956-1990)....................................................................
Stewart, Charles J., Ph.D. (1955-1992) ..........................................................
Stewart, Douglas B., Ph.D. (1971-2001).......................................................essor of Economics
Stewart, Kris W. (1984-2013)............................................Professor of Computer Science

Stichler, Jaynelle F. (2006-2012) $\qquad$ Professor of Nursing Stites, Francis N., Ph.D. (1968-2000)...... Professor of History [Senate Distinguished Professor] Stock, Robert L. (1975-2012).........................................Associate Professor of Public Affairs Stoddart, Jess L., Ph.D. (1966-1998) .................................................................... Strand, Paul J., Ph.D. (1977-2004)........................................... Professor of Political Science
Stratton, Frank E., Ph.D., Professional Degree in Civil Engineering
(1966-1997)...........................................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
Strong, Douglas H., Ph.D. (1964-1990) $\qquad$ Professor of History
Stuart, Robert J., Ph.D. (1969-1987)............Professor of Electrical and 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-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
Swiniarski, Roman W., Ph.D. (1988-2014)............................... Professor of Computer Science
Talamantes, Florence W., Ph.D. (1962-1992) ..........................Associate Professor of Spanish
Talbert, Freddie D., Ph.D. (1968-2002)...............................Associate Professor of Astronomy

Terry-Guyer, Linda L., Ed.D. (1990-2007).........................Associate Professor of 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, Gordon M., Ph.D. (1969-2001) ....................Associate Dean, College of Education; Associate Professor of Counseling and School Psychology
Thompson, Patrick W., Ed.D. (1990-1999)................................... Professor of Mathematical and Computer Sciences
Thyagarajan, Kadayam S., Doctorate of Engineering
(1980-1999)..........................................Professor of Electrical and Computer Engineering
Todero, Catherine M., Ph.D. (2006-2012) ............................................. Professor of Nursing
Toole, Howard R., Ph.D. (1972-2005) ...............................................Professor of Accountancy
Tran, My Luong, Ph.D. (1981-2006)..........................Associate Professor of Teacher Education
Treadway, Jr., Gerald H., Ed.D. (1970-2006) .............................Professor of Teacher Education
Troxell, Eugene A., Ph.D. (1966-2000) ................................Associate Professor of Philosophy
Tsoukas, Constantine (1986-2013) .................................................................essor of Biology
Turner, Marjorie S., Ph.D. (1954-1977) .................................................Professor of Economics
Turhollow, C. Anne (1982-2013)................................................................... Librarian
Tyagi, Pradeep K. (1982-2012)....................................................Professor of Marketing
Underhill, Robert, Ph.D. (1972-2007)..............................................Professor of Linguistics
Vails-Weber, Dorothy V., M.A. (1970-1998) ..................................................................
Valle, Juan Ramon, Ph.D. (1974-1996) ............................................ Professor of Social Work
Vandenberg, Pieter A., D.B.A. (1969-2004) .............................................. Professor of Finance
Vanderbilt, Kermit, Ph.D. (1962-1988).................................................. Professor of English
and 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)................................................................essor 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-Ibarra, José L., Ph.D. (1976-1991)........Associate Professor of Spanish, Imperial Valley Campus
Vartanian, Pershing, Ph.D. (1968-2001) .................................................................
Venable, Carol F., Ph.D. (1987-2010)..........................................................essor of Accountancy
Venieris, Yiannis P., Ph.D. (1967-1998)..............................................Professor of Economics
Verderber, Anne, Ph.D. (1971-1992) ......................................Associate Professor of Nursing
Vergani, GianAngelo, Dottorato in Lettere (1963-1992)............................ Professor of Italian Vik, Gretchen N., Ph.D. (1975-2009)...............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).............................. Associate Professor of Mathematical and Computer Sciences
Vuskovic, Marko I., Ph.D. (1986-2010) ................................... Professor of Computer Science
Wahl, Patricia R., Ph.D. (1990-2006)................................................... Professor of Nursing
Walba, Harold, Ph.D. (1949-1986)......................................................Professor of Chemistry
Walker, Carolyn L., Ph.D. (1986-2010) ................................................. Professor of Nursing
Wall, Carey G., Ph.D. (1971-2002).... ... Professor of English
Wallace, Robert D., Litt. D. (1957-1986)
.. 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 Ward-Steinman, David, D.M.A. (1961-2003) ... Albert W. Johnson Distinguished Professor of Music Warren, Edward W., Ph.D. (1963-1990) .......................... Professor of Philosophy and Classics Warschauer, Thomas M.D., Ph.D. (1977-2005) ..................................... 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
Webb, Charles R., Ph.D. (1949-1972, except 1965) ..................................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).................................................................essor of Botany
Weeks, John R. (1974-2013).............. Albert W. Johnson Distinguished Professor of Geography
Weinberg, Marsha, M.A. (1994-2011) ........ Therapist, Counseling and Psychological Services
Weiner, Michael A., Ph.D. (2000-2005) ................................ Professor of Asia Pacific Studies
Weissman, Stanley N., Ph.D. (1962-1991)...................................................essor of Philosophy
Wells, Richard W., M.A. (1961-1994) ....................... Associate Professor of Physical Education
Werner, Joan T., Ph.D. (1965-1998).....................................Associate Professor of Sociology
Wetherill, William H., Ph.D. (1957-1982) ..................... Professor of Educational Administration
White, Phillip M., M.L.S. (1985-2011)............................................................. 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., Certified Public Accountant (1978-1999).................Professor of Accountancy
Widmer, Kingsley, Ph.D. (1956-1991) ............. Professor of English and Comparative Literature
Wilbur, Robert W., Ph.D. (1974-2004) .............................Associate Dean for Academic Affairs, College of Business Administration; Associate Professor of Finance
Wilding, John H., Ed.D. (1960-1986) ....................................... Professor of Teacher Education
Williams, Diane R., M.A. (1975-2002)............Associate Professor of Communicative Disorders
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) ................. Associate Professor of Physical Education
Williamson, James E., Ph.D., Certified Public Accountant
(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, Carlos G., Ph.D. (1992-2006)........................................................... Professor of Spanish
Wilson, Patricia A., D.P.A. (1990-2007)... Professor of Public Administration and Urban Studies
Winslow, Robert W., Ph.D. (1965-2000)................................................Professor of Sociology
Witherspoon, John P., M.A. (1979-1992) ............... Professor of Telecommunications and Film
Wolf, R. Craig, M.F.A. (1987-2010)........................... Professor of Theatre, Television, and Film

Woo, Catherine Yi-yu Cho, Ed.D. (1970-1997).....Albert W. Johnson Distinguished Professor of Chinese [Senate Distinguished Professor]
Woodson, John H., Ph.D. (1961-1998) ................................................... Professor of Chemistry
Wotruba, Thomas R., Ph.D. (1962-2000) .................................................
Wozniak, Dolores A., Ed.D. (1976-2004).............Dean, College of Health and Human Services; Professor of Nursing
Wright, Penny L., Ph.D. (1972-2002).............................................. Professor of Management
Wright, Richard D., Ph.D. (1964-2002).............................................Professor of Geography
Wulfeck, Beverly B., Ph.D. (1994-2014).......................... Professor of Speech, Language, and Hearing Sciences

Wylie, Donald G., Ph.D. (1966-1992) Yerkes, Diane M., Ed.D. (1999-2001) and Postsecondary Education .. Associate Professor of Administration, Rehabilitation

Young, Ronald R., Ph.D. (1971-2003).

## Zedler, Joy B., Ph.D. (1972-1998).

Zedler, Paul H., Ph.D. (1969-1998)
.. Associate Professor of Spanish
$\qquad$ .Professor of Biology
Professor of Biology

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 Zuniga, Maria E., Ph.D. (1985-2002).............................................. Professor of Social Work
Zyskind, Judith W., Ph.D. (1982-2002) ................................................. Professor of Biology


## Lecturers 2014-2015

## ARTS AND LETTERS

Abassi, Shogofa, M.A., Women's Studies
Aguilar, Temet, J.D., American Indian Studies
Alfaro, Victor Clark, M.A., Arts and Letters
Alicio, Atilio Vega, Ph.D., Linguistics
Anderson, Ryan B., M.A., Anthropology
Anderson-Cruz, Helen, Ed.D., Rhetoric and Writing Studies Andres, Trudi Lee, M.A., Anthropology
Annicchiarico, Judith L., M.A., Rhetoric and Writing Studies
Applegate, Lauren Jennifer, D.A.R.T., Spanish
Arredondo, Sophia C., B.A., Women's Studies
Avner, Robin S., Ph.D., Rhetoric and Writing Studies
Baker, Sarah A., M.A., Rhetoric and Writing Studies
Barhoum, Sim, M.A., Rhetoric and Writing Studies
Bauer, Danielle C., M.A., Women's Studies
Beck, Audrey Nicole, Ph.D., Political Science, Sociology
Bee, Ronald J., B.A., Political Science
Benza, Magdalena, B.A., Geography
Bhuiyan, Arafiena Tamanna, M.A., Rhetoric and Writing Studies
Birnbaum, Sariel, Ph.D., Arts and Letters
Black, Shannon B., M.A., Anthropology
Boeck, Candace A., M.B.A., Rhetoric and Writing Studies Bolivar, Maria Dolores, Ph.D., Chicana and Chicano Studies Borgen, Linda C., Ph.D., Rhetoric and Writing Studies
Braff, Lara Rachel, M.A., Anthropology
Brown, Ajani A., M.F.A., Africana Studies
Brown, Alison Marie, Ph.D., Philosophy
Brown, Dawn M., M.A., Rhetoric and Writing Studies
Brush, Barbara L., M.F.A., Rhetoric and Writing Studies
Bryson, Liane, Ph.D., Rhetoric and Writing Studies
Cadena, Jose Hector, M.F.A., Chicana and Chicano Studies
Caldwell, Michael Alan, Ph.D., Classics And Humanities, Religious Studies
Carrico, Richard L., M.A., American Indian Studies Castro, Esther, M.A., Spanish
Cavender, Annette, M.F.A., Rhetoric and Writing Studies Centanni, Louis Anthony, B.A., Rhetoric and Writing Studies Christy, Alexandra Hart, M.A., Linguistics
Cissel, Sean F., M.F.A., Rhetoric and Writing Studies
Clague, Christopher K., Ph.D., Economics
Clanton, Gordon, Ph.D., Sociology
Connolly, Michael L., B.S., American Indian Studies
Coons, Cathlyn Ann, M.S., Rhetoric and Writing Studies
Copeland, Matthew, M.F.A., Rhetoric and Writing Studies
Cornell, Caleigh B., M.A., Rhetoric and Writing Studies Coste, Jill E., M.A., English
Costello, Matthew J., M.F.A., Rhetoric and Writing Studies
Costello, Molly M., Ph.D., Geography
Coto, Nancy M., M.A., Spanish
Covington, Lisa Danielle, M.A., Africana Studies
Cummings, Tracy C., M.F.A., English
Dalton, Eric J., M.A., Linguistics
Darcuiel, Geneva R., M.A., Women's Studies
Davis, Daniel Brent, M.A., Sociology
De Abreu, Cassia C., M.A., Spanish
Degueldre, Christian, M.A., Spanish
Dibella, Edward G., M.A., History
Dill Jr, Bert L., M.A., Rhetoric and Writing Studies
Dirige, Ofelia V., Ph.D., Asian Studies
Egipto, Rebecca P., M.A., Linguistics
El Cheddadi, Youniss, B.A., Linguistics
Elliott, Debra A., M.A., Sociology, Women's Studies
Ewell, Jonathan F., Ph.D., English
Federman, Nancy J., Ph.D., Sociology
Feres, Angela M., Ph.D., Asian Studies, Religious Studies
Fielden Jr, Carl J., M.A., Rhetoric and Writing Studies
Fimbres, Sandy M., M.A., Rhetoric and Writing Studies
Fish, Hedda A., M.A., Rhetoric and Writing Studies
Fisher, Delores, M.A., Africana Studies
Fisk, David L, Ph.D., Political Science
Frame-Day, Stephanie Rae, M.A., Linguistics
Frampton, Edith E., Ph.D., English
Franco, Maribel, B.A., International Business
Fuller, Amanda M., B.A., Rhetoric and Writing Studies
Galbraith, Mary P., Ph.D., English
Garza, James C., Ph.D., Chicana and Chicano Studies
Gastelum, Yvonne A., Ph.D., Political Science
Gastil, George Christopher, M.A., History

Gauss, David R., M.A., Sociology
Gillman, John L., Ph.D., Religious Studies
Gonda, Susan, M.A., Women's Studies
Gonda, Susan, M.A., Women's Studies
Gonzalez, Maria , Mon
Gonzalez-Meeks, Moriah Kristin, M.A., Women's Studies Goodman, Rhonda K., M.A., Rhetoric and Writing Studies Granger, John F., Ph.D., English
Greb, G Allen, Ph.D., Political Science
Groza, Adriana, M.A., Rhetoric and Writing Studies
Guthrie, Mary C., Ph.D., English
Gutierrez, Sonia, M.A., Chicana and Chicano Studies
Guzman, Christine, M.A., European Studies
Guzman, Roberto, M.A., Arts and Letters
Hall, Joshua J., M.A., Rhetoric and Writing Studies
Hallett, Melodie J., M.S., Sociology
Harris, Bonnie M., Ph.D., History
Hay, Jeffrey T., Ph.D., History
Hazboun, Reem S., M.A., Linguistics
Heck, Edward V., Ph.D., Political Science
Herman, Thomas M., Ph.D., Geography
Hernandez, Julie Marjean Corvera, M.A., Linguistics, Rhetoric and Writing Studies
Hilanto, Kimberly Laine, Ph.D., Linguistics
Hoffman, Catherine A., M.A., Rhetoric and Writing Studies Holslin, Jill M., M.A., Rhetoric and Writing Studies
Hughes, Katie D., M.A., Rhetoric and Writing Studies
Huhn, Arianna Sherie, Ph.D., Anthropology
Hurley, James C., M.S., Rhetoric and Writing Studies
Ingram III, James W., Ph.D., Political Science
Jerry, Anthony R., M.A., Anthropology, Arts and Letters
Jerry, Anthony R., M.A., Anthropology, Arts and Letters
Jones, Millie Ann, M.Ed., Rhetoric and Writing Studies
Jones, Millie Ann, M.Ed., Rhetoric
Justice, Paul W., M.A., Linguistics
Justice, Paul W., M.A., Linguistics
Kading, Silvia, M.A., European Studies
Kang, In Sook, M.A., Linguistics
Keller Lapp, Heidi Marie, Ph.D., History
Kelley, Elizabeth, M.A., Linguistics
Kelley, Maureen Lee, M.A., Rhetoric and Writing Studies
Kelliher, Joseph P., M.A., Spanish
Kelly, Mary L., M.A., Arts and Letters
Kim, Helen Haekyung, M.A., Linguistics
Kinkade, Martha E., M.F.A., Rhetoric and Writing Studies
Kirkegaard, Bradford Andrew, M.A., Arts and Letters, Religious Studies
Kline, Karl A., M.F.A., Rhetoric and Writing Studies
Kobari, Sam Damon, M.A., Anthropology
Kolovos, Alexander, Ph.D., Geography
Kuhlken, Pamela Fox, Ph.D., Classics And Humanities, Religious Studies
Kuhn, Brianna Lynn, M.A., Rhetoric and Writing Studies Kuratani, Asuka O., M.A., Linguistics
LaPlante, Marisela, M.L.S., International Business
Larom, David Lee, Ph.D., Asian Studies, Political Science Lennox, Jaime L., M.A., Anthropology
Lerma, Mayra Yukie, M.A., European Studies
Li, Shubin, Ed.D., Linguistics
Linfor, Cali, M.F.A., Rhetoric and Writing Studies
Locklear, Linda R., M.A., American Indian Studies
Lomayesva, Devon Lee, J.D., American Indian Studies
Macias, Abel Roque, M.A., Chicana and Chicano Studies
Macias, Georgina, M.A., Spanish
Madden, Jamie L., M.A., Rhetoric and Writing Studies
Mahdavi-Izadi, Farid, Ph.D., History
Major, Ivan I., Ph.D., Economics
Manley, Peter J., M.F.A., Rhetoric and Writing Studies
Marshall, Meagan E., M.F.A., English
Matsuoka, William M., M.A., Economics
McClary, Kelley A., M.A., Rhetoric and Writing Studies
McGann, Scott J., M.A., Economics
Mellos, Vickie D., M.A., Linguistics, Rhetoric and Writing Studies
Meltzer, Scott A., A.B.D., Religious Studies
Mendoza, Jose L., M.A., Spanish
Mercurio, John E, M.A., Political Science
Merriam, Steve, Ph.D., Rhetoric and Writing Studies
Merritt, Anthony W., Ph.D., Africana Studies
Merton, Elizabeth Catherine, M.S., Rhetoric and Writing Studies
Minniti-Shippey, Jennifer M., M.F.A., English
Miquel, Florence M., M.A., European Studies
Monk, Lenore, M.A., Linguistics

Morales, Ruth, M.A., Economics
Morgan, Patricia K., M.A., Rhetoric and Writing Studies
Motiee, Mani, M.A., Linguistics
Mukherjee, Sanchita, Ph.D., Economics
Murico, Jeffrey C., M.A., Religious Studies
Murren, James F., M.S., Political Science
Myers, Todd Eric, Ph.D., Asian Studies
Naor, Moshe, Ph.D., History
Nare, Jessica Leora, M.A., Women's Studies
Nerhan, Nolana M., M.A., Rhetoric and Writing Studies
Nericcio, Rosalinda, M.A., Spanish
Neuner, Araceli P., M.A., Philosophy
Nguyen, Thanh Tam, B.A., Economics
Nobiletti, Frank W., M.A., History
O'Donnell, Megan Rian, M.A., Rhetoric and Writing Studies
Olesen, Melissa Ann Wagoner, M.A., Political Science
Olivos, Edward M., Ph.D., Spanish
Osborn, Alan R., Ph.D., Geography
Osborn, Alan R., Ph.D., Geography
Owens, Cara R., M.A., Rhetoric and Writing Studies
Owens, Cara R., M.A., Rhetoric and Writing Studies
Padrick, Kendell Rachelle, M.A., Linguistics, Rhetoric and Writing Studies
Paligutan Jr, Proceso James, Ph.D., History
Palomino, David Louis, M.S., Geography
Pantoja, Greg John, M.A., Chicana and Chicano Studies
Parker, Jason W., M.A., Rhetoric and Writing Studies
Parker, Kelsey S., M.A., Linguistics, Rhetoric and Writing Studies
Parker, Lindsay A. H., Ph.D., History
Parras Serradilla, Maria Guadalupe, M.A., Spanish
Pasamonik, Rina Otsuka, M.A., Linguistics
Pasha, Katayun, B.A., Rhetoric and Writing Studies
Paydar, Pooneh, B.A., Linguistics
Perez, Alma N., M.A., Chicana and Chicano Studie
Pressman-Lupien, Jessica Brie, Ph.D., English
Presston, Sarah Amber, M.A., Rhetoric and Writing Stud
Preston, Sarah Amber, M.A., Rhetoric and Writing Stud
Progar, Brendt S., M.A., Rhetoric and Writing Studies
Progar, Brendt S., M.A., Rhetoric and Writing Studies
Putko, Carole A., A.B.D., History
Quan, Nghiep C., B.A., Rhetoric and Writing Studies
Quintanilla, Felipe, Ph.D., Arts and Letters, Classics and Humanities
Ransom Thomson, Holly Elizabeth, M.A., European Studies
Reddick, Bonnie L., M.A., Africana Studies
Renner, Lynette E., B.A., Rhetoric and Writing Studies
Reyes, Herminia V., M.A., Philosophy
Richardson, Diana G., M.A., Geography
Rim, Kathy Heyun, Ph.D., Political Science
Robbins, Brett A., Ph.D., Classics And Humanities
Rockland, Steven G., M.A., Economics
Rodriguez, Barbara, Ph.D., Spanish
Rodriguez, Barbara, Ph.D., Spanish
Rossiter, Jonathan T., M.A., Geography
Rossiter, Jonathan .., M.A., Geography
Rosskopf, Amy E., M.A., European Studies
Rosskopf, Amy E., M.A., Europe
Roy, Carolyn S., A.B.D., History
Roy, Carolyn S., A.B.D., History
Ruggeri, Rosamaria, M.A., European Studies
Ruiz, Stevie R., Ph.D., Chicana and Chicano Studies
Ruston, Ian Sam, A.A., Linguistics
Sadegholvad, Elham, M.A., European Studies
Sager, Jennifer Young, M.A., Rhetoric and Writing Studies
Salsitz, Elena Leigh, M.B.A., Arts and Letters
Samstad, James G., Ph.D., Political Science
Sargent, Tiffany Jeanne, M.A., Economics
Sasson, Aharon, Ph.D., Anthropology
Schell, Emily M., Ed.D., Arts and Letters
Schlereth, Stephen P., Ph.D., Sociology
Schlesinger, Steven A., M.A., Philosophy
Schuermann, Savanna, B.A., Anthropology
Schuur, Nicholas J., M.A., Rhetoric and Writing Studies
Scott, Wendy Susan, B.A., Rhetoric and Writing Studies
Scripter, Claire Devin, M.A., Women's Studies
Seitz, Sally Davies, Ph.D., Sociology
Semm, Paul T., M.A., Sociology
Severance, Jacqueline P., M.A., Arts and Letters
Shanklin, Michael T., Ph.D., Linguistics
Sheehan, Kevin J., Ph.D., History
Shembel, Daria, M.A., European Studies
Sheppard, Jennifer Ann, Ph.D., Rhetoric and Writing Studies
Sherman, Beth, M.P.A., Rhetoric and Writing Studies
Shumate, Kathleen R., M.F.A., English
Shuster, Alana, D.E.D., Linguistics
Sigmon, Celia A., M.F.A., Rhetoric and Writing Studies
Siminski, Nicole Diane, M.A., Linguistics
Sirota, Molly Renee, M.S., Anthropology

Slaska, Margaret R., M.S., Women's Studies
Slater, Martha Monika, M.A., Rhetoric and Writing Studies
Siater, Martna M., D.M.A., Political Science
Solomon, Johanna A., M.A., Political Science
Sommer, Rikke H., M.A., European Studies
Spears, Lauren, M.A., Rhetoric and Writing Studies
Stein, Robert Harold, M.A., Rhetoric and Writing Studies
Stewart, Lori A., M.A., Religious Studies
Stohs, Stephen M., Ph.D., Economics
Strom, Yale, M.A., Arts and Letters
Sullivan, Matthew T., M.A., Economics
Sylvers, Josephine, M.A., European Studies
Tannenhaus, Nuria G., M.A., Spanish
Tempelton, Janet, M.A., Rhetoric and Writing Studies
Thomas, Jesse J., Ph.D., Religious Studies
Thompson, Catherine A., Ph.D., Women's Studies
Thompson, Tyler William, M.A., Rhetoric and Writing Studies
Thorngren, Jane M., Ph.D., Geography
Thuet, Coral M., B.A., Chicana and Chicano Studies
Tiboris, Michael Gus, Ph.D., Philosophy
Tipton Jr, Norman E., J.D., Sociology
Tomlin, Rita C., M.A., Rhetoric and Writing Studies
Towner, James T., M.A., Rhetoric and Writing Studies
Underwood, Michael R., M.A., Rhetoric and Writing Studies
Vanderpot, John L., M.A., Rhetoric and Writing Studies
Wang, Qian, M.A., Linguistics
Wang, Yan, M.S., Arts and Letters
White, Siobhan T., M.A., Rhetoric and Writing Studies Whitworth, Emmalee Rose, M.A., Rhetoric and Writing Studies
Williams, Julie A., M.A., Rhetoric and Writing Studies Williams, Marla Grupe, M.A., Rhetoric and Writing Studies
Williamson, Maria, M.A., International Business
Wilson, Erwin J., B.A., European Studies
Wong, Amy C., M.A., Sociology
Wysocki Jr, David James, M.A., Arts and Letters
Yanguas, Inigo Amadeo, Ph.D., Spanish

## BUSINESS ADMINISTRATION

Andreev, Andrei, M.B.A., Finance
Ashworth, Steven Douglas, Ph.D., Management
Austin, Naida, J.D., Management
Barry, Amy Christine, M.S., Accountancy
Baumunk, Jon Adam, J.D., Accountancy
Belch, Gayle C., M.B.A., Marketing
Berenson, Robert L., M.A., Marketing
Berenson, Robert L., M.A., Market
Berkley, Holly A., B.A., Marketing
Berkley, Holly A., B.A., Marketing
Bianchi, Carmen, M.A., Management
Bonilla, George L., M.B.A., Management Information Systems
Christiansen, Aline V., M.B.A., Marketing
Colaprete, Zuzana, J.D., Finance
Cook, Jeffrey B., M.B.A., Finance
Cooper, John R., M.S., Accountancy
Copic, Miro, M.B.A., Marketing
Corbitt, Gail Fern, Ph.D., Management Information Systems
Dock, Kristie Ann, M.Ed., Business Administration
Donahue, Teresa, M.B.A., Business Administration
Dos Santos, Jose Ricardo, M.B.A., Management
Eaton, Daniel E., J.D., Management
Gaffen, Steven Allan, M.B.A., Marketing
Gaffen, Steven Alan, M.B.A., Marketing
Gayles, Eric S., Ph.D., Management Information Systems
Glover, Bryan M., M.B.A., Management
Goldman, Mark H., B.S., Finance
Gray, Tita Louise, M.B.A., Business Administration
Haddock, Lisa C., Ph.D., Marketing
Harrington, Don L., J.D., Finance
Hertz, Tanya Marie, M.B.A., Management
Hewapathirana, Gertrude Iranganie, Ph.D., Management
Jaques, Kathryn M., B.A., Accountancy
Jawad, Shatha, Ph.D., Management Information Systems
Jones, Nancy Jean, M.B.A., Accountancy
Judge, Robert A., Ph.D., Management Information Systems
Kaplowitz, Seth Marc, J.D., Finance, Management
Kerins, Ashley Brooke, Ph.D., Accountancy
King, Kimberly Davis, M.B.A., Management
Kolman, Scott J., M.B.A., Finance
Kramer, Kenneth W., M.B.A., Finance
Kramer, Kenneth W., M.B.A., Finance
Kuhn, Dana William, M.A., Finance
Ledwith, James W., M.B.A., Accountancy
Lightner, Kevin M., Ph.D., Accountancy
MacKenzie, Narelle Elizabeth, B.B.A., Accountancy
Manning, Scott Alan, M.B.A., Marketing
McGinley, Daniel J., M.S., Management
Mercado, Sarah Elizabeth, M.A., Business Administration
Mikolajczak, Kristin R., M.S., Accountancy
Minto, Scott D., B.S., Business Administration
Newport, Devona Darlene, M.S., Accountancy
Nguyen, Hung Quoc, Ph.D., Finance
Nicasio-Mercier, Eva, M.B.A., Management

Nielander, Steve B., M.B.A., Finance
O'Byrne, Christopher B., M.S., Management Information Systems
Olson, Lois B., M.B.A., Marketing
Osinski, Steven Frank, M.B.A., Marketing
Ostermiller, Daniel Lee, M.A., Management Information Systems
Palacio, Maria D., M.A., Business Administration
Pandya, Sandeep, M.B.A., Marketing
Parks, Dana Lee, M.B.A., Finance
Patrick, Wendy L., J.D., Management
Probett, Christine Helen, M.B.A., Management Information Systems
Probst, Jeffrey John, M.S., Finance
Reily, Patricia, Ed.D., Management
Rezania, Omid, Ph.D., Finance
Robbins, Steven B., D.E.D., Management
Ryan, Frank, M.A., Finance
Sager, Paul A., B.S., Accountancy
Sannwald, William W., M.B.A., Management
Schroeder, Bernhard, B.B.A., Management
Seiver, Daniel A., Ph.D., Finance
Shaul, Kelly C., J.D., Management Information Systems
Showghi, Robert Sohrab, M.B.A., Management Information Systems
Sloan, Michael L., M.A., Management
Soares, Allison Decelles Hebl, Ph.D., Accountancy
Sopp, Trudy, Ph.D., Management
Tan, Jason D., M.Ed., Business Administration
Trzos, Thomas Dale, M.B.A., Management Information Systems
Turner-Arsenau, Kathryn Louise, J.D., Management
Tyler, William C., M.S., Management Information Systems
Ucieda, Jose Luis, Ph.D., Accountancy
Van Damme, Patricia Flores, M.A., Business Administration
Vogt, James Vincent, M.S., Accountancy
Warschauer, Thomas M., D.B.A., Finance
Williams, Steven Edward, Ph.D., Management
Williamson, James E., Ph.D., Accountancy

## EDUCATION

Adams, Charlotte M., M.A., Teacher Education
Adler, Danielle Elizabeth Beaty, M.S., Teacher Education
Allen, Aida D., M.A., Teacher Education
Andrews, Mary Ellen M., M.S., Special Education
Aperule, Charles Joseph, M.S., Administration, Rehabilitation and Postsecondary Education
Aste, Marian, M.S., Dual Language and English Learner Education, Teacher Education
Austin, James Earl, M.B.A., Education
Banuelos, Alma D., M.S., Counseling and School Psychology
Barba, Yolanda, E.D.S., Counseling and School Psychology
Begley, Maureen Eliabeth, M.Ed., Teacher Education
Behana, Elinor E., M.S., Child and Family Development
Beltran, Lisa C., M.S., Child and Family Development
Biasotti, Nancy A., Ed.D., Counseling and School Psychology
Bobroff, Sheryl Plost, M.S., Special Education
Booth, Jacki L., Ph.D., Child and Family Development
Boyd, Briana Lynne, Ph.D., Counseling and School Psychology
Bracken, Wendy S., Ed.D., Education
Brown, Jeanne Marie, M.A., Teacher Education
Brum, Christopher Robert, M.A., Special Education
Bucholtz, Jeffrey S., M.A., Counseling and School Psychology
Burow, Constantina Pavlov, M.B.A., Teacher Education
Cajigas, Sandra Mercedes, M.A., Dual Language and English Learner Education
Calderon, Martha A., M.A., Special Education
Camarena, Juan F., M.S., Counseling and School Psychology
Cantor, Karen, M.S., Counseling and School Psychology
Cesena, Cynthia J., M.B.A., Child and Family Development
Chambliss, Judith Anne, Ed.D., Special Education
Clarey, Amy M., E.D.S., Counseling and School Psychology
Close, Catherine, M.A., Education, Special Education, Teacher Education
Collins-Parks, Tamara, Ph.D., Dual Language and English Learner Education, Education
Colver, Michelle Jeannette, M.A., Special Education
Compton, Charles Michael, Ed.D., Administration, Rehabilitation and Postsecondary Education,
Conrad, Gail J., Ed.D., Administration, Rehabilitation and Postsecondary Education
Crabtree, Mary, M.A., Teacher Education
Daneshvar, Sabrina D., Ph.D., Special Education
Darcuiel, Geneva R., M.A., Counseling and School Psychology
Davies, Gloria Sarah Brovick, M.A., Education, Teacher Education

Davis Bauer, Heather Ann, Ph.D., Child and Family Development
De Bie, Karen A., E.D.S., Counseling and School Psychology
Del Busto, Roberto A., M.A., Teacher Education
Dengerink, Kathleen E., M.A., Special Education
Douglass, Mayumi Yamanaka, M.S., Counseling and School Psychology
Dowd, Bonnie Ann, Ed.D., Education
Drahota, Amy, B.A., Special Education
Duarte, Danielle Rosa, M.S., Counseling and School Psychology
Duncan, Ruth A., B. A., Teacher Education
Dunleavy, Teresa Kathleen, Ph.D., Teacher Education
Escobedo, Jose F., Ed.D., Education
Estes, Ronald J., M.A., Counseling and School Psychology
Evans, Mary Lou, M.A., Special Education
Ewing, Janice Ann, Ph.D., Counseling and School Psychology
Filley, John Robert, M.S., Administration, Rehabilitation and Postsecondary Education
Fritz, Jeannie Hernandez, M.A., Child and Family Development
Froehbrodt, Richard Chris, M.A., Dual Language and English Learner Education
Fuller, Jacqueline Diane, M.A., Education
Gallozzi, Francesca, M.A., Child and Family Development
Ganelin, Patricia East, Ph.D., Child and Family Development
Gardner, Pamela W., M.S., Child and Family Development
Gedney, Georgeanne, M.Ed., Special Education
George, Victoria L., M.S., Administration, Rehabilitation and Postsecondary Education
Gibson, Kristin L, M.A., Teacher Education
Ginsberg, Eric J., M.A., Teacher Education
Gomez, Mariana, Ed.D., Counseling and School Psychology
Gomez, Mariana, Ed.D., Counseling and Couns Jennifer Abanico, E.D.S., Counseling and School Psychology
Grajeda, Oscar Javier, E.D.S., Counseling and School Psychology, Special Education
Grant, Cheryl Marcia, M.S., Counseling and School Psychology
Gray, Susan P., Ph.D., Education
Green, Regina, Ph.D., Special Education
Guillen, Ernestina R., M.A., Special Education
Gutierrez, Gabriel, Ph.D., Counseling and School Psychology
Hagan, Virginia Loh, Ed.D., Education, Teacher Education
Hancock, Sarah Price, M.S., Administration, Rehabilitation and Postsecondary Education
Hartzell-Cushanick, Rose Marie, Ph.D., Counseling and School Psychology
Herrin, Bridget M., Ed.D., Education
Herrin, Bridget M., Ed.D., Education
Hiestand, Danielle Julia, Psy.D., Counseling and School Psychology
Holcomb, Rana M., M.S., Counseling and School Psychology
Howerton, Elizabeth Ann, M.A., Special Education
Hoxie, Natalie Auyong, M.A., Special Education
Hummel, Angela Sherry, M.A., Education, Teacher Education
Janney, Karen E., Ed.D., Education
Jarosz, Eva J., M.Ed., Counseling and School Psychology
Jobin, Allison Brooke, Ph.D., Child and Family Development
Johnson, Kelly Moore, M.A., Teacher Education
Johnson, Pamela Jeanne, M.A., Education, Special Education
Jones, Nicole L., M.S., Counseling and School Psychology
Joyce, Ginger L., M.S., Special Education
Jullie, Emily Rose, B.A., Dual Language and English Learner Education
Kahn, Sarah Z., M.A., Counseling and School Psychology
Kasendorf, Stacey J., M.A., Special Education
Kaupp, Mark A., DPSY, Counseling and School Psychology
Kent, Nicole Marie, Ph.D., Child and Family Development
Kim, Andy Jin, Ed.D., Counseling and School Psychology
Klausing, Mona, M.S., Counseling and School Psychology
Lacey, William C., M.S., Administration, Rehabilitation and Postsecondary Education
Larsen, Suzanne A. K., Ph.D., Special Education
Lesicko, Dean Lance, M.S., Counseling and School Psychology
Leszynski, Erin, M.A., Special Education
Lineback, Jennifer Evarts, Ph.D., Teacher Education
Littrell, Jarleen, M.A., Teacher Education
Lozada, Rosa Ana W., M.S.W., Child and Family Development
Lozada, Rosa Ana W., M.S.W., Child and Family
Lugo, Blanca Lizbeth, M.S., Counseling and School Psychology
Luster, Pamela Thompson, Ed.D., Education
Lynch Muecke, Christine Louise, M.Ed., Child and Family Development
Mahaffey, Patricia Ann, Ed.D., Administration, Rehabilitation and Postsecondary Education
Maheronnaghsh, Sarah Genoa, M.A., Dual Language and English Learner Education, Education
Malaret, Johanna, Psy.D., Counseling and School Psychology

Mallory, Sherry Lynn, Ph.D., Administration, Rehabilitation and Postsecondary Education
Marotta, Antonio B., Ph.D., Counseling and School Psychology
Mayer, George Roy, Ed.D., Special Education
Mays, Jennifer Anne, M.S., Special Education
McCarty, Anne Catherine, M.A., Special Education
McClure, Melinda K., M.A., Special Education
McNally, Andrew G., M.S., Special Education
Morales Hoffman, Lydia E., M.A., Dual Language and English Learner Education
Moriarty, Gail E., M.A., Teacher Education
Mortimer, Behnush Barzegarian, Ph.D., Administration, Rehabilitation and Postsecondary Education
Munoz, Gloria Ivonne, M.A., Dual Language and English Learner Education
Myers, Donald N., Ph.D., Child and Family Development Nelson, John M., Ed.D., Education
Nguyen, Tri Chanh, Psychology M.S., Counseling and School Nodurft, Colby Leigh, M.A., Teacher Education
Noyes, David A., D.E.D., Administration, Rehabilitation and Postsecondary Education
Olivos, Edward M., Ph.D., Dual Language and English Learner Education
Oram, Christopher D., Ph.D., Education
Orozco, Agustin, M.A., Counseling and School Psychology
Pablo, Nicole M., M.S., Counseling and School Psychology
Pacheco, Robert James, Ed.D., Education
Park, Hillary Diane, M.A., Teacher Education
Perdomo, Marcela, M.A., Special Education
Perez, Josilyn M., M.S., Counseling and School Psychology
Perez, Lynne G., Ph.D., Education

## Perlin Robyn L., MA., Education

Pierce, Ann B., M.S., Counseling and School Psychology
Pierce, Ann B., M.S., Counseling and School Psych
Pilakowski, Michael J., M.A., Teacher Education
Pilakowski, Michael J., M.A., Teacher Education
Pileski, Leticiacristina Gonzalez, Ph.D., Counseling and School Psychology
Plotkin, Ronald Cary, Ph.D., Child and Family Development
Poland, Rachel M., M.Ed., Teacher Education
Pongyingpis, Karl, Psy.D., Counseling and School Psychology
Portolos, Vanessa A., M.A., Teacher Education
Prime, Carol S., M.A., Education, Teacher Education
Prodor, Catherine A., M.A., Special Education
Quirin, Maryjane L., M.A., Teacher Education
Rahimi, Golbanou,' M.S., Counseling and School Psychology
Ramirez, Celia A., Ph.D., Teacher Education
Ramirez, Jorge A., Ed.D., Dual Language and English Learner Education
Ranck-Buhr, Wendy L, Ph.D., Teacher Education
Reeve, Linda L., M.S., Special Education
Reiter-Cook, Jennifer J., M.Ed., Special Education
Reyes, Marco Antonio, M.A., Special Education
Rich, Vivian J., M.A., Teacher Education
Robbins, Alice A., M.A., Teacher Education
Rodenberg, Johanna K., Ed.D., Teacher Education
Rodriguez-Brown, Christine A., M.A., Special Education
Rogers, James V., Ph.D., Counseling and School Psychology
Romero, Jaime, E.D.S., Counseling and School Psychology
Rosser, Anne L., M.A., Teacher Education
Rowe-Odom, Michelle Juliette, M.A., Counseling and School Psychology
Saake, Karen Louise, M.A., Special Education
Salgado, Yvonne M., B.S., Special Education
Sanchez, Ruben Joaquin, E.D.S., Counseling and School Psychology
Schell, Emily M., Ed.D., Education, Teacher Education
Schmalzel, Linda G., B.S., Administration, Rehabilitation and Postsecondary Education
Senour, Maria N., Ph.D., Counseling and School Psychology
Silva, Aida Linda, M.A., Teacher Education
Simpson, Jermaine R., M.A., Counseling and School Psychology
Slaska, Margaret R., M.S., Counseling and School Psychology
Sleichter, Jenna E., M.A., Special Education
Sleichter, Kimberly Sara, M.A., Special Education
Smith, Dominique B., M.S.W., Education
Smith, Lisa M., M.S., Counseling and School Psychology
Sparaco, Lisa M., Ph.D., Teacher Education
Sparaco, Lisa M., Ph.D., Teacher Education
Spooner, Anne Jeanette McLevie, M.A., Child and Family
Development
D. Summer La Donna, J.D., Special Education
Stech, Summer La Donna, J.D., Special Education
Stengel, Mark L., M.S., Education, Special Education
Stengel, Mark L., M.S., Education, Special
Stock, Julie V., M.Ed., Teacher Education
Tamanaha-Justeson, Debora M., M.A., Teacher Education
Taylor, Mary M., M.Ed., Special Education
Telfer, Bonnie J., M.A., Education, Teacher Education
Torns, Warren George, M.S., Teacher Education
Tung, Hsing-Chen, Ed.D., Child and Family Development

Valdivia, Isabel P., Ed.D., Dual Language and English Learner Education
Vasquez Urias, Marissa Christina, Ed.D., Education
Vasquez Urias, Marissa Christina, Ed.D., Education
Walsh, Christopher Edward, M.S., Child and Family Development
Whiteside, Hillary A., M.A., Special Education
Wible, Stacy Jo, M.A., Teacher Education
Wible, William W., M.A., Teacher Education
Wilkinson, Brenda Lynne, M.A., Child and Family Development
Wong, Connie Shu Ya, Ph.D., Special Education
Wong-Kerberg, Linda J., M.S., Counseling and School Psychology
Wright, Nelson D., M.Ed., Administration, Rehabilitation and Postsecondary Education
Wright, Susan Jane, M.A., Special Education
Zamani, Navid J., M.A., Counseling and School Psychology
Zlotnik, Susan C., M.A., Teacher Education

## ENGINEERING

Amen, Sameh Latif, M.S., Civil, Construction, and Environmental Engineering
Arnold, Kenneth David, B.S.E.E., Computer Enginnering, Electrical Engineering
Ayala, Ricardo, M.S., Mechanical Engineering
Beheshtipour, Morteza, B.S., Civil, Construction, and Environmental Engineering
Butler, Geoffrey S., M.S., Aerospace Engineering, Mechanical Engineering
Cawley, Nancy R., Ph.D., Aerospace Engineering, Mechanical Engineering
Chaudhuri, Arnab, Ph.D., Aerospace Engineering, Mechanical Engineering
Cowin, Stephen Corteen, Ph.D., Mechanical Engineering
Deutsch, Daniela, M.C.E., Civil, Construction, and Environmental Engineering
Dubney, Gregory O., P.H.E., Computer Enginnering, Electrical Engineering
Espinoza, Julian Guy, B.E., Mechanical Engineering
Feteih, Salah El-Din Mohamed, Ph.D., Aerospace Engineering, Mechanical Engineering
Filho, Mario Kataoka, Ph.D., Aerospace Engineering, Mechanical Engineering
Fogel, Gary B., Ph.D., Aerospace Engineering, Mechanical Engineering
Garcia, Adrian, B.S., Mechanical Engineering
Garcia, Theresa M., B.S., Engineering
Graham, Matthew Ryan, Ph.D., Mechanical Engineering
Guven, Halil Mustafa, Ph.D., Engineering
Guven, Halil Mustafa, Ph.D., Engineering
Haughey, James Ross, M.B.A., Civil, Construction, and Environmental Engineering
Hemati, Hossein, M.S., Civil, Construction, and Environmental Engineering
Johnston, Thomas, B.S., Mechanical Engineering
Kennedy, John P., B.S., Computer Enginnering, Electrical Engineering
Meneses, Jorge Fernando, Ph.D., Civil, Construction, and Environmental Engineering
Merritt, Steven Andrew, B.S., Civil, Construction, and Environmental Engineering
Miller, James Scott, B.S., Civil, Construction, and Environmental Engineering
Mullinix, James Anthony, B.S., Aerospace Engineering, Mechanical Engineering
Negus, Charles H., Ph.D., Mechanical Engineering
Nourollahi, Hamid, M.S., Aerospace Engineering, Mechanical Engineering
Oberrecht, Stephen Patrick, Ph.D., Aerospace Engineering, Civil, Construction, Environmental Engineering, Mechanical Engineering
Palmiter, Scott M., M.S., Aerospace Engineering, Mechanical Engineering
Pamintuan, Eric D., B.A., Engineering
Parsons, Tamara Lynn, M.S., Civil, Construction, and Environmental Engineering
Patel, Akash Chandra Vinod, B.S., Civil, Construction, and Environmental Engineering
Phillips, David B., Ph.D., Computer Engineering, Electrical Engineering
Prince, John Paul, B.S., Civil, Construction, and Environmental Engineering
Riley, Terrie Kim, B.S., Mechanical Engineering
Rivera, Joshua A., M.S., Aerospace Engineering, Mechanical Engineering
Saft, Lima K., Ph.D., Civil, Construction, and Environmenta Engineering
Scholefield, Pamela Jean, J.D., Civil, Construction, and Environmental Engineering
Schuh, George J., A.A., Civil, Construction, and Environmental Engineering

Scott, Zachary Bryan, Ph.D., Civil, Construction, and Environmental Engineering
Shirkey, Daniel Alan, B.S., Civil, Construction, and Environmental Engineering
Simpkins Jr, Charles Alexander, Ph.D., Mechanical Engineering
Smith, Timothy Matthew, M.S., Civil, Construction, and Environmental Engineering
Stark, Frank Patrick, B.E., Civil, Construction, and Environmental Engineering
Tedesco, Carl E., M.S., Aerospace Engineering, Mechanical Engineering
Torres, Ricardo Benjamin, B.S., Aerospace Engineering,
Mechanical Engineering
Umstot, David J., M.E., Civil, Construction, and Environmental Engineering
Wang, Shuyi, Ph.D., Civil, Construction, and Environmental Engineering
Williams, Emir E., B.S., Civil, Construction, and Environmental Engineering
Zink, Thomas Andrew, M.S., Civil, Construction, and Environmental Engineering

## HEALTH AND HUMAN SERVICES

Aguinaldo, Arnel L., M.A., Exercise and Nutritional Science
Anguera, Joaquin, Ph.D., Social Work
Archuletta, Kim Y, M.S.W., Social Work
Arellano, Maria Rosalia, M.S., Exercise and Nutritional Science
Asawapornmongkol, Essie, M.S., Nursing
Barker, Melanie Ann, M.S.W., Social Work
Barragan, Silvia Arias, M.S.W., Social Work
Bass, Susan L., M.S.N., Nursing
Bass, Susan L., M.S.N., Nursing
Bertken, Renee Ann, M.S.N., Nursing
Bertken, Renee A.Edward W., D.P.T., Exercise and Nutritional Science
Bezkor, Edward W., D.P.T., Exercise and Nutritional Science
Bidwell, Janice D., M.N., Nursing
Binkin, Nancy Jeanne, M.D., Public
Binkin, Nancy Jeanne, M.D., Public Health
Bonnar, Wendy Lynn, M.S.N., Nursing
Bradway Jr, Richard R., M.S.W., Social Work
Branch, Carol A., M.A., Speech, Language, and Hearing Sciences
Brandstein, Kendra P., Ph.D., Public Health
Burke, Darlene Mary, Ph.D., Nursing
Burke-Doe, Annie P., Ph.D., Exercise and Nutritional Science
Burns, Della E., F.N.P., Nursing
Carlson, Jordan A., Ph.D., Public Health
Carrilio, Terry E., Ph.D., Social Work
Casey, Carolynne C., Ph.D., Nursing
Castaneda, Sheila Faye, Ph.D., Public Health
Cianflone, Nancy Faye, D.P.H., Public Health
Cianflone, Nancy Faye, D.P.H., Public Health
Comana, Fabio, M.S., Exercise and Nutritional Science
Comana, Fabio, M.S., Exercise
Concilio, Lisa, B.S.N., Nursing
Copland, Bonnie J., M.S.N., Nursing
Copp, Linda J., M.S., Exercise and Nutritional Science
Corbett, Rosalind Celeste, M.S., Social Work
Cosio, Jennifer Martinez, M.S.W., Social Work
Cullum, Kristiana Gay Huffman, Ph.D., Nursing
Dalaly, Basil Kamil, Ph.D., Exercise and Nutritional Science
Daly, Donna M., M.S.W., Health and Human Services
Daly, Patricia M., M.P.A., Public Health
De Silva, Sriyani R., M.S.N., Nursing
DeVries, Nikole Marie, M.S.N., Nursing
Doherty, Matthew Tyson, M.S., Exercise and Nutritional Science
Donahue-Marucheau, Elizabeth Doris, M.S.W., Social Work
Donahue-Marucheau, Elizabeth Doris, M.S.W., Sociar Wo
Dorricott, Janette, M.A., Speech, Language, and Hearing Sciences
Dunagan, Ilene Marie, M.S.N., Nursing
Dwyer, George, M.S.W., Social Work
Easter, Veneta Simone, M.S.N., Nursing
Elder, Malinda, M.S., Nursing
Elson, Candy J., M.S.W., Social Work
Emory, Kristen T., Ph.D., Public Health
Eskridge, Susan Lindsay, Ph.D., Exercise and Nutritional Science
Fanta, Etopi, M.P.H., Nursing
Fass-Holmes, Brenda, B.A., Public Health
Ferran, Karen Lee, Ph.D., Public Health
Ferraro, Kathryn Clark, M.P.H., Exercise and Nutritional Science
Finkel, Janet M, M.S., Nursing
Fox, Malinda Kay, M.S., Nursing
Galang, Carmen B., D.N.S., Nursing
Galer, Rose A., M.S., Public Health
Garver, Sandra, M.S., Exercise and Nutritional Science
Georgeson, Jacquelyn J., A.U.D., Speech, Language, and Hearing Sciences
Gray, Pamela, M.S.N., Nursing
Gribble, Joanne Ruth, Ph.D., Nursing

Grillo, Michael Raul, Ph.D., Public Health Gurfield, Arleen Nicole, B.S., Public Health
Hall, Joan M., M.S.N., Nursing
Hail, Joan M., M.S.N.,, Nursing
Harbertson, Judith, Ph.D., Public Health
Harbertson, Judith, Ph.D., Public He
Harrell, Dawn Marie, M.S., Nursing
Harrell, Dawn Marie, M.S., Nursing
Heiss, Amy Lee, M.S.N., Nursing
Heiss, Amy Lee, M.S.N., Nursing
Hernandez, Amalia Barraza, M.S.W., Social Work
Hernandez, Lisa M., M.S., Exercise and Nutritional Science
Herold, Gerilyn R., M.S.N., Nursing
Hinshaw, Jeffrey Wyn, B.A., Exercise and Nutritional Science
Holub, Christina Kim, Ph.D., Public Health
Hornberger, Steven David, M.S.W., Social Work
Hughen, Janet E., M.S.N., Nursing
Hughes, Deanna Michelle, Ph.D., Speech, Language, and Hearing Sciences
Huppenbauer, Sandra Lee, M.S.N., Nursing
Iniguez-Stevens, Esmeralda, D.P.H., Public Health
Jackson, Norman D., M.S., Social Work
Jackson, Norman D., M.S., Social Work
Jakobcic, Patricia M., M.S.W., Social Work
James, Cheryl Theresa, M.S.W., Social Work
James, Cheryl Theresa, M.S.W., Social Work
Jones, Michael Anthony, M.S.W., Social Work
Jones, Michael Anthony, M.S.W
Jurf, Julie B., M.S.N., Nursing
Kari, Sherry Harris, M.S.N., Nursing
Kassem, Nada O., D.P.H., Public Health
Katzman, Jodi S., M.S.N., Nursing
Kelly, Karen Rachele, Ph.D., Exercise and Nutritional Science
Kimbrell, Patricia A., B.A., Exercise and Nutritional Science
Kreisworth, Virginia S., Ph.D., Public Health
LaHaye, Mark Edward, M.S., Nursing
Lane, Kelly Jean, M.S., Exercise and Nutritional Science
Lantz, John Martin, Ph.D., Nursing
Laslovich, Steven Matthew, D.P.T., Exercise and Nutritional Science
Lautemann, Drew A., J.D., Social Work
Lennard, Ryan C., B.S., Exercise and Nutritional Science
Lennard, Ryan C., B.S., Exercise and Nutritional
Levenberg, Carolyn Kate, M.S.W., Social Work
Lischke, Nancy L., M.N., Nursing
Livermore, Sarah Deur, Ph.D., Nursing
Long, Linda M. M S.N., Nursing
Long, Linda M., M.S.N., Nursing
Lopes, Charlotte M., M.A., Speech, Language, and Hearing Sciences
Macapugay, Kirin Amiling, M.S.W., Social Work
Macchione, Nicola N., M.P.H., Public Health
Madigan, Angelica, M.S.N., Nursing
Maves, Robin C., M.N., Nursing
McCalmont, Vicki Lynn, M.S., Nursing
McEwan, Leslie G., M.S.N., Nursing
Mckinney, Robert Nelson, M.A., Speech, Language, and Hearing Sciences
McRae, Paul A., M.A., Speech, Language, and Hearing Sciences
Merchant, Kathleen Marie, Ph.D., Exercise and Nutritional Science
Meredith, Suzanne Louise Henry, B.A., Exercise and Nutritional Science
Miller, Mary E., M.A., Nursing
Moreno, Kim Louise, Ph.D., Nursing
Mote, Olga G., M.S.N., Nursing
Mulvihill, Mary M., Ph.D., Public Health
Murray, Paula J., M.P.H., Public Health
Nash, Janet I., M.S., Exercise and Nutritional Science
Nelson, Nancy Ann, M.S.N., Nursing
Nogueras, Eileen, M.S.N., Nursing
Oday, Brenda C., B.S., Exercise and Nutritional Science
Parr, Mary E., M.S.N., Nursing
Parr, Mary E., M.S.N., Nursing
Pasamonte, Debbie M., M.A., Nursing
Peck, Marjorie, Ph.D., Nursing
Petrisko, Mayumi J., M.S., Exercise and Nutritional Science
Phelps, Kathleen M., M.S.W., Social Work
Prescher, Kelly L., Ph.D., Exercise and Nutritional Science
Preston, Patricia T., M.S.N., Nursing
Ramirez, Jason Christopher, M.A., Nursing
Reader-Dover, Kelly Maria, M.A., Exercise and Nutritional Science
Reyes, Maria Lourdes Fernandez, M.D., Public Health Riedel, Roxanne Oona Allegra, M.A., Health and Human Services
Rivera, Xanthe Miedema, M.S.N., Nursing
Robinson, Jessica Marie, M.S.W., Social Work
Rodriguez-Lainz, Alfonso, Ph.D., Public Health
Rouse, Melissa Dawn, M.N., Nursing
Rupp, Joan W., M.S., Exercise and Nutritional Science
Ryan, Barbara E., M.A., Social Work
Samad, Ruth, Ph.D., Nursing
Schmitz, Linda A., M.S., Speech, Language, and Hearing Sciences
Scholar, Kylee Renee, M.S., Exercise and Nutritional Science
Scott, Michele Lee, M.A., Nursing
Searcy, Karyn Lewis, M.A., Speech, Language, and Hearing Sciences

Segars, Lance B., Ph.D., Social Work
Sendek, Laura, M.A., Speech, Language, and Hearing Sciences
Siegel, Marci W., M.S.W., Social Work
Smith, Tracy Alexandra, P.H.S., Exercise and Nutritional Science
Soto, Matthew J., B.S., Exercise and Nutritional Science
Sturdevant, Leah Elizabeth, M.A., Exercise and Nutritional Science
Taylor, Inge H., M.A., Nursing
Tewell, Barbara Susan, M.S., Nursing
Thomann, Lea L., D.P.T., Exercise and Nutritional Science
Thorpe, Susan Salenko, M.A., Speech, Language, and Hearing Sciences
Thurman, Janian Kaye, B.A., Exercise and Nutritional Science
Tinley, Scott P., Ph.D., Exercise and Nutritional Science
Tran, Bonnie R., Ph.D., Public Health
Troutner, Christina Laura Marie, M.S., Exercise and Nutritional Science
Turner, Sharron Ann, M.A., Speech, Language, and Hearing Sciences
Villasenor, Adriana, Ph.D., Health and Human Services
Voigt, Gregory D., M.A., Exercise and Nutritional Science
Waalen, Jill M., M.D., Public Health
Walsh, Margaret Louise, Ph.D., Public Health
Wiborg, Lan Chun Ng, M.P.H., Public Health
Wild, Susan W., M.N., Nursing
Wolf, Janet Claire, M.P.H., Public Health
Yaghmaee, Saman, M.A., Social Work
Zawilski, Alexandra Justine, B.S., Exercise and Nutritional Science
Zirkle, Dorothy L., Ph.D., Nursing

## PROFESSIONAL STUDIES AND FINE ARTS

Allen, Isaac, M.M., Music and Dance
Anastasia, Desire J. M., M.S., Public Affairs
Armstead, Rulette V., M.A., Public Affairs
Ayres, Michelle Elizabeth, D.A.R.T., Music and Dance
Barajas Escamilla, Maria Del Rocio, Ph.D., Public Affairs
Barker, Valerie E., Ph.D., Journalism and Media Studies
Bassett, Sean C., M.A., Music and Dance
Benzel, Gary M., B.F.A., Art and Design
Blake, Brian P., B.S., Hospitality, and Tourism Management
Blik, Tyler A., B.F.A., Art and Design
Bolzenthal, Bryan Robert, D.M.A., Music and Dance
Bowman, Blaine K., J.D., Public Affairs
Bracy, Nicole Leah, Ph.D., Public Affairs
Burckle-Sullivan, Carrie Ann, M.F.A., Art and Design
Burgess, Michele, M.F.A., Art and Design
Burton, Debra L., M.M., Music and Dance
Campbell, John J., M.A., Hospitality and Tourism
Management
Management
Carlson, Craig J., M.A., Art and Design
Chang, Melody Elim, M.M., Music and Dance
Choi, Min K., B.A., Art and Design
Choong, Angela Y., M.M., Music and Dance
Cicalo, Lora E., and Media Studies M.S., Journalism
Coddon, David L., M.F.A., Journalism and Media Studies
Cohen, Gregory Scott, M.A., Music and Dance
Corr, Michael J., B.A., Hospitality and Tourism Management
Cotnoir, Meredith L., M.A., Art and Design
Couper, Michael S., D.M.A., Music and Dance
Crockett, Kelley E., Ph.D., Public Affairs
Crockett, Keiley E., Ph.D., Public Affairs
Curtis, Christine E., B.A., Public Affairs
Czech, Kathleen, Ed.D., Communication
Czech, Kathieen, Ed.D., Communication
Dathe, Stephanie Marie, B.A., Hospitality and Tourism Management
Defino, Lisa G., B.S., Hospitality and Tourism Management
Del Busto, Roberto A., M.A., Journalism and Media Studies
Diprofio, Erika Suzanne, B.A., Journalism and Media Studies
Eger, John M., J.D., Professional Studies and Fine Arts
Ekard, Walter F., J.D., Public Affairs
Epps, Richard D., M.A., Public Affairs
Erb Jr, John A., M.Ed., Music and Dance
Eron, Lucy E., M.A., Art and Design
Fallon Jr., William E., M.A., Communication
Farnsley IV, Alexander, M.A., Theatre, Television, and Film
Fierro, Gilbert, B.S., Public Affairs
Fobes, David A., M.F.A., Art and Design
Fobes, David A., M.F.A., Art and Design
Fobian, Donald K., J.D., Public Affairs
Fobian, Donald K., J.D., Public Affairs
Fogelquist, Mark Stephen, M.A., Music and Dance
Fogelquist, Mark Stephen, M.A., Music a
Frosio, Patricia A., M.P.A., Public Affairs
Frosio, Patricia A., M.P.A., Public Affairs
Fuller, Edwin Daniel, B.A., Hospitality and Tourism Management
Funicello, Ralph, B.F.A., Theatre, Television, and Film
Gerdes, Michael David, M.M., Music and Dance
Ginsberg, Maya L., M.A., Music and Dance
Goeltzenleuchter, Brian K., M.F.A., Public Affairs

Gonzalez, Mario, M.A., Music and Dance
Goret, Robin M., M.A., Journalism and Media Studies
Greenbaum, Alexander Max, M.A., Music and Dance
Greenberg, Sue K., B.S., Hospitality and Tourism Management
Harn, Jay C., M.A., Journalism and Media Studies
Hearn, Loretta, B.A., Journalism and Media Studies
Hemmens, Jason W., M.S., Hospitality and Tourism Management
Hesser, Martina Anna, Ph.D., Art and Design
Hewitt, David W., M.F.A., Art and Design
Hibbs, Cory T., M.M., Music and Dance
Hoey, Rachel N., B.A., Theatre, Television, and Film
Hoffman, Alan Stuart, M.S., Public Affairs
Hoskins, Aaron J., B.A., Journalism and Media Studies
Humphrey, Jessica Renee, M.F.A., Music and Dance
Iberri-Shea, Daniel Edmund, M.A., Communication
Irey, Kathryn J., C.E.R., Music and Dance
Irey, Kathryn .., C.E.R., Music and Danes, Toni, M.M., Music and Dance
Jarbes, Susan C., Ph.D., Communication
Jarboe, Susan C., Ph.D., Communica
Jokar, Gelareh, B.A., Art and Design
Jokar, Gelareh, B.A., Art and Design
Jordan, Robert A., M.A., Theatre, Television, and Film
Kartalija, Melanie Ann, M.S., Journalism and Media Studies
Keith, Carolyn J., M.A., Theatre, Television, and Film
Kruming, Martin A., J.D., Journalism and Media Studies
Kurtz, Jeremy S., M.A., Music and Dance
Kwon, Yang J., M.F.A., Art and Design
Lai, Otto, M.S., Art and Design
Lamke, Gene G., M.A., Hospitality and Tourism Management
Lamson, Mark David, M.F.A., Music and Dance
Lee, Sarah Meghan, B.A., Journalism and Media Studies
Leivers, Gary Philip, B.A., Art and Design
Liebhaber, Pei Chun Tsai, D.M.A., Music and Dance
Littlefield, Dana Stacey, M.A., Journalism and Media Studies
Littlefield, Dana Stacey, M.A., Journalism and Media Studie
Lockwood, Alane S., M.A., Journalism and Media Studies
Lockwood, Alane S., M.A., Journalism and Media Studies
Lopez, Gabriel Martinez, B.A., Journalism and Media Studies
Lopez, Gabriel Martinez, B.A., Journalism
Luera, Maryann A., M.F.A., Art and Design
Luera, Maryann A., M.F.A., Art and Design
Lustig, James B., M.S., Hospitality and Tourism Management
Lustig, James B., M.S.,' Hospitality and
Maril, Travis A., M.M., Music and Dance
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Mc Bride, James F.,'M.S., Journalism and Media Studies
McBride, Charles H., M.B.A., Public Affairs
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Mokalis, Alexa Louise, M.A., Journalism and Media Studies
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Morgan, Ashley Lynn, M.A., Communical
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Najor, Ron, M.A., Theatre, Television, and Film
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Sayer, Thomas, J.D., Hospitality and Tourism Management
Scholes, Erin Reid, B.S., Hospitality and Tourism Management
Sheehan, Jerome J., B.A., Theatre, Television, and Film
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Sorensen, Gina Bolles, M.F.A., Music and Dance
Sorensen, Jonathan Kyle, M.F.A., Music and Dance
Sorensen, Jonathan Kyle, M.F.A., Music a
Soukup, Karl P., M.M., Music and Dance
Stacy, Daniel Franklin, Ph.D., Public Affairs
Stacy, Daniel Franklin, Ph.D., Public Affair
Starr, Eric P., D.M.A., Music and Dance
Starr, Eric P., D.M.A., Music and Dance
Taylor, Giancarlo, M.A., Professional Studie
Taylor, Giancarlo, M.A., Professional Studies and Fine Arts
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Trepchina, Natalia, M.A., Art and Design
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Vargas-Viglotti, Nicole Marie, B.A., Journalism and Media Studies

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Whitmore, Tessie C., M.F.A., Art and Design
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Williams, Allyson B., M.A., Art and Design Wimboprasetyo, Djoko W., M.A., Music and Dance
Winchell, Jill G., B.A., Art and Design
Winslow, Allison Anderson, M.A., Communication
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Wyss, Robert S., B.F.A., Art and Design

## SCIENCES

Ahsan, Mitra, M.A., Math and Science Education
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Armor, David A., Ph.D., Psychology
Ashlyn, Jahna A., Ph.D., Psychology
Ashworth, Steven Douglas, Ph.D., Psychology
Bajic, Ivan F., M.S., Computer Science
Bajic, Ivan F., M.S., Computer Science
Barr, Jeremy John, Ph.D., Biology
Barr, Jeremy John, Ph.D., Biology
Bartoli, Peter John, B.S., Computer Science
Bartoli, Peter John, B.S., Comp
Bass, Eric M., Ph.D., Physics
Bodie, Lorah W., Ed.D., Sciences
Camp, Victor E., Ph.D., Geological Sciences
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Chavez, Thelma C., B.A., Sciences
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Laumakis, Mark, Ph.D., Psychology
Leach, Robert W., Ph.D., Astronomy
Leduc, Steven A., M.A., Physics
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Leonard, Guy, M.S., Computer Science
Leonard, Guy, M.S., Computer Scien
Leonard, Nikki Lynn, M.S., Biology
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Schlagel, Rachel Haine, Ph.D., Psychology
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Strauss, Justin J., M.S., Biology
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Taylor, Michael J., Ph.D., Psychology
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Ulloa, Emilio C., Ph.D., Psychology
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Windmiller, Gur, M.S., Astronomy
Young, Shin Yeh, M.A., Math and Science Education
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Abbott, Janet M., M.A., Undergraduate Studies
Acharya, Chetana, M.S., Undergraduate Studies
Bendall, Sharon Fortner, M.S., Undergraduate Studies
Egipto, Rebecca P., M.A., Undergraduate Studies
Fielden, Vicki G., M.A., Undergraduate Studies
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Justice, Paul W., M.A., Undergraduate Studies
Justice, Paul W., M.A., Undergraduate Studies
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Kuhn, Dana William, M.A., Undergraduate Studies
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Lopez, Michelle Dizon, B.A., Undergraduate Studies
Preciado, Jose R., B.A., Undergraduate Studies
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## ATHLETICS

Allnutt, Stephen Benjamin, M.S., Athletics
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Mattera, Peter A., M.A., Athletics
McDonald, Roland G., B.S., Athletics
Oliveira, Joseph Anthony, M.A., Athletics

Padilla, Edward P., M.A., Athletics
Pawlowski, John, B.Ed., Athletics
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## IMPERIAL VALLEY CAMPUS

Aguilar, Norma A., B.A., Imperial Valley Campus Alcantar Garcia, Fernando Mosheh, M.A., Imperial Valley Campus
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Ketchum, Monica D., M.A., Imperial Valley Campus Ketchum, Monica D., M.A., Imperial Valley Cam
Kofford, Bret M., M.A., Imperial Valley Campus Kofford, Bret M., M.A., Imperial Valley Campus Kofford, Sandra Luz, Ed.D., Imperial Valley Campus
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Shinn, James D., M.A., Imperial Valley Campus
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## ARTS AND LETTERS

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Connolly, Michael, B.S., American Indian Studies
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Cova, Thomas, Ph.D., Geography
Curti, Giorgio, Ph.D., Geography
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Diamant, Kathi, B.A., Dean's Office
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Foster, Frances, Ph.D., English
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García Zapata, Adriana, B.A., Chicana and Chicano Studies
Gardiner, Colin, Ph.D., Geography
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Gross, G. Timothy, Ph.D., Anthropology
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## BUSINESS ADMINISTRATION

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Hadjis, George, M.B.A., Management
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Boggs, George, Ph.D., Administration, Rehabilitation and Postsecondary Education
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Warn, Michelle, Ph.D., Administration, Rehabilitation and Postsecondary Education

## ENGINEERING

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## HEALTH AND HUMAN SERVICES

Aaron, William, B.S., Exercise and Nutritional Sciences
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## General Catalog, Graduate Bulletin, and Class Schedule

The General Catalog is published annually in May and 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.
TheGeneralCatalog can be purchased at theSDSUBookstore. Mail orderinformation is availableathttp://www.aztecshops.com. The General Catalog is also available on the SDSU website at http://arweb.sdsu.edu/es/catalog/.
The Graduate Bulletin is published annually in May and 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://arweb.sdsu.edu/es/catalog/bulletin/.
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.
The College of Extended Studies also publishes three catalogs each year, in spring, summer, and fall, listing extension, certificate, and professional development programs and courses available to the general public. The catalog is free and is mailed to interested students upon request by calling 619-594-5152.

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[^0]:    San Diego State University maintains and promotes a policy of nondiscrimination and nonharassment on the basis of

[^1]:    * Upper division courses in the major and minor must be taken for a letter grade unless they are offered only credit/no credit.

[^2]:    * Cultural diversity course.

[^3]:    * Cultural diversity course.
    $\wedge$ Taught in English.
    $\dagger$ Either Asian Studies 460 (IV.B.) or Asian Studies 422/History 422 (IV.C.) may be taken for General Education credit.
    @English 533 may not be used in place of English 302 for General Education credit.

[^4]:    * Cultural diversity course.
    $\dagger$ Either Asian Studies 460 (IV.B.) or Asian Studies 422/History 422 (IV.C.) may be taken for General Education credit.
    $\wedge$ Taught in English.

[^5]:    ART 250. The Contemporary House (3)
    Six hours.
    Prerequisite: Art 148.
    Elementary problems in neighborhood planning, house design, and landscaping.

[^6]:    + Additional prerequisites required.

[^7]:    * Additional prerequisites required for this certificate.

[^8]:    * Prerequisite waived for this course.

[^9]:    * The ELM requirement is satisfied by this course only if the student has already attempted and failed the ELM.

[^10]:    * Additional prerequisites required for this certificate.

[^11]:    *Additional prerequisites may be required for courses in the minor.

[^12]:    * If more than one of these courses are completed, the additional course(s) will count as an elective.
    Additional prerequisites required

[^13]:    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.

[^14]:    * Additional prerequisites required.

[^15]:    * Additional prerequisites required.

[^16]:    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.

[^17]:    * Specified sections.

[^18]:    * No more than three units may be applied to the minor in women's studies.

