

General Catalog

and

Announcement of Courses

Volume 86

1999-2000

San Diego State University
5500 Campanile Drive
San Diego, California 92182
(619) 594-5200
<http://www.sdsu.edu>

Dear Student,

Welcome to San Diego State University. SDSU is a wonderfully talented, diverse, energetic learning community that is dedicated to providing educational experiences, in and out of the classroom, which will embrace and develop the abilities of all individuals. As a member of this community of learners, your success at SDSU will depend upon the effort you are prepared to invest in your own growth and development.

No university can be adequately reflected in the pages of a catalog such as this. The spirit of our students, the talent and dedication of our faculty, the care and concern provided by administrative, professional, and support staff cannot be captured on these pages – yet each is essential to the spirit of San Diego State University. This catalog provides a starting place in which you can find some basic information which we hope will be helpful. Don't hesitate to supplement it with personal inquiries. We are proud of San Diego State University and are eager to answer any questions you may have. We will do our best to be of assistance to you.

We are people who live and learn together and share a common vision of academic excellence through teaching, research, and service. I am pleased that you have chosen to be a part of our community. SDSU is one of this state's and nation's great universities; we look to you to help us become still better as we shape our global future together.

Stephen L. Weber
President

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Annual Calendar

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1999–2000

Academic Calendar

SUMMER SESSIONS 1999*

June 1-18	Term A (3 weeks).
June 1-25	Term B (4 weeks).
June 1-July 9	Term C (6 weeks).
June 1-August 20	Term Z (12 weeks).
June 21-July 23	Term D (5 weeks).
June 21-July 30	Term E (6 weeks).
June 21-August 13	Term F (8 weeks).
July 4-5	Holiday – Independence Day. Staff holiday (no classes).
July 12-August 20	Term G (6 weeks).
August 2-20	Term H (3 weeks).

FALL SEMESTER 1999

August 1	Applications for admission or readmission to San Diego State University for the spring semester 2000 accepted. Applications are NOT accepted after August 31 (postmarked). Graduate applicants should consult the Bulletin of the Graduate Division for closing dates.
August 23	Opening date of semester for faculty.
August 23-27	Orientation and advising days.
August 30	First day of classes.
Aug. 30-Sept. 13	Late registration.
September 6	Holiday – Labor Day. Staff holiday (no classes).
September 13	Last day to drop classes.
September 14	Last day to apply for refunds.
September 17	Last day to file application for bachelor's degree for December 1999 graduation.
September 17	Last day to apply for request to enroll for concurrent master's degree credit.
September 20	Last day to add classes, change grading basis, or apply for course "forgiveness."
September 20	Last day to withdraw officially from the University for fall semester 1999.
September 27	Census.
September 27	Last day to apply for December 1999 graduation with an advanced degree, Graduate Division.
November 1	Applications for admission or readmission to San Diego State University for the fall semester 2000 accepted. Applications are NOT accepted after November 30 (postmarked). Graduate applicants should consult the Bulletin of the Graduate Division for closing dates.
November 25-27	Holiday – Thanksgiving recess. Staff holiday (no classes).
December 10	Last day of classes before final examinations.
December 11-18	Final examinations.
December 22	Winter recess begins.
December 22-28	Holiday – Winter recess. Staff holiday (no classes).
December 29	Grades due from instructors. (Noon deadline.)
December 29	Last day to apply for a leave of absence for fall semester 1999.
December 29	Last day of fall semester.
Dec. 31-Jan. 1	Holiday – New Year's. Staff holiday (no classes).

WINTER SESSION 2000*

January 3-21	Winter Session.
January 17	Holiday – Martin Luther King, Jr. Day. Staff holiday (no classes).

SPRING SEMESTER 2000

January 17	Holiday – Martin Luther King, Jr. Day. Staff holiday (no classes).
January 24	Opening date of semester for faculty.
January 24-28	Orientation and advising days.
January 31	First day of classes.
Jan. 31-Feb. 11	Late registration.
February 1	Applications for bachelor's degree for December 2000 graduation accepted.
February 11	Last day to drop classes.
February 14	Last day to apply for refunds.
February 18	Last day to file application for bachelor's degree for May and summer 2000 graduation.
February 18	Last day to apply for May 2000 graduation with an advanced degree, Graduate Division.
February 18	Last day to add classes, change grading basis, or apply for course "forgiveness."
February 18	Last day to withdraw officially from the University for spring semester 2000.
February 18	Last day to file petition for concurrent master's degree credit for spring semester 2000.
February 25	Census.
April 15	Last day of classes before spring recess.
April 17-22	Spring recess.
April 24	Classes resume.
May 18	Last day of classes before final examinations.
May 19	Study and consultation day until 4:00 p.m.
May 19-26	Final examinations.
May 27-28	Commencement.
May 29	Holiday – Memorial Day. Staff holiday (no classes).
May 31	Grades due from instructors. (Noon deadline.)
May 31	Last day to apply for a leave of absence for spring semester 2000.
May 31	Last day of spring semester.
July 1	Applications for bachelor's degree for May and summer 2001 graduation accepted.

SUMMER SESSIONS 2000*

May 30-June 16	Term A (3 weeks).
May 30-June 23	Term B (4 weeks).
May 30-July 7	Term C (6 weeks).
May 30-August 18	Term Z (12 weeks).
June 19-July 21	Term D (5 weeks).
June 19-July 28	Term E (6 weeks).
June 19-August 11	Term F (8 weeks).
July 4	Holiday – Independence Day. Staff holiday (no classes).
July 10-August 18	Term G (6 weeks).
July 31-August 18	Term H (3 weeks).

* Refer to the Summer and Winter Sessions bulletin for a list of courses offered during summer and winter. Offerings in some departments are limited.

(Please Note: This is *not* to be construed as an employee work calendar.)

Schedule of Fees

1999–2000

Fees and tuition are subject to change without notice by the Trustees of The California State University.

For updated information regarding the fee structure for 1999-2000 refer to the fall Class Schedule.

FEES MUST BE PAID PRIOR TO CALLING REGLINE. CHECKS ACCEPTED FOR EXACT AMOUNT OF FEES. OVERPAYMENTS OF \$5.00 OR LESS ARE REFUNDED ONLY UPON REQUEST. IF YOUR CHECK FOR REGISTRATION FEES OR TUITION IS RETURNED BY THE BANK FOR ANY REASON, YOUR REGISTRATION MAY BE CANCELED AND YOU WILL BE BILLED \$40.00 (a dishonored payment charge of \$20.00 and late fee of \$20.00). PAYMENT OF FEES FOR REGLINE OR LATE REGISTRATION SHOULD BE MADE BY CHECK OR MONEY ORDER. THE UNIVERSITY RESERVES THE RIGHT TO REFUSE PAYMENT BY PERSONAL CHECK FROM THOSE INDIVIDUALS WHO HAVE PREVIOUSLY HAD ITEMS RETURNED UN-PAID BY THEIR BANK. REFUNDS MAY BE APPLIED AGAINST OTHER AMOUNTS DUE THE UNIVERSITY. CHECKS TO BE MADE PAYABLE TO SDSU. DO NOT ENCLOSE CASH. CREDIT CARDS ARE NOT ACCEPTED FOR PAYMENT OF REGISTRATION FEES OR NON-RESIDENT TUITION, EXCEPT AS APPLICABLE UNDER THE TERMS OF THE INSTALLMENT PAYMENT PLAN.

ADMINISTRATIVE/FINANCIAL HOLDS

All administrative and financial holds must be cleared prior to submittal of payment for registration or other University services. See "Debts Owed to the Institution" below. 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.

Payments to clear financial holds must be made by cash, money order, or certified check. Personal checks or charge cards will NOT be accepted.

REGISTRATION FEES – ALL STUDENTS:

(On basis of units carried.)

Fee payment information and instructions are in the Class Schedule available at the Campus Store.

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 and other zero unit courses are charged as one unit for fee purposes.

Units Attempted	Registration Fee
Undergraduate	
0 units – 6.0 units	\$612.00
6.1 or more units	\$927.00
Graduate	
0 units – 6.0 units	\$633.00
6.1 or more units	\$966.00

The above fee also includes a Student Activity Fee of \$15.00, a Student Union Fee of \$71.00, a Facilities Fee of \$3.00, an Instructionally Related Activities Fee of \$15.00, a Health Services Fee of \$70.00, and a State University Fee of \$438.00 or \$753.00, depending on unit load.

Imperial Valley Campus students pay a Student Union Fee of \$24.00 and a Health Services fee of \$55.00. See Imperial Valley Campus Bulletin for details.

The total fee paid per term will be determined by the number of units taken, including those in excess of fifteen.

No fees of any kind shall be required of or collected from those individuals who qualify for such exemption under the provisions of the Alan Pattee Scholarship Act.

Legal residents of California are not charged out-of-state tuition.

INSTALLMENT PLAN

An installment plan is available for students who wish to pay their registration fees (and tuition, if applicable*) in payments. There is a \$33.00 service charge for this service, paid at the time the initial registration payment is made. Additional information and instructions are available in the Class Schedule or may be obtained from the University Cashiers Office.

* Additional service charges apply to out-of-state and foreign tuition only. Service charge is equal to 15% of each installment payment of tuition.

TUITION FOR NONRESIDENT STUDENT * (Foreign and Out-of-State)

Tuition will be charged for all units attempted.

Per unit \$246.00

(Tuition is payable in addition to registration fees listed above. 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 600.00

* Pending Trustee approval, a \$24.00 increase to \$270.00 per unit may be imposed for nonresident tuition.

PARKING FEES

Nonreserved parking space, per semester \$78.00
Car pool—see Cashiers Office.

Less than four-wheeled, self-propelled vehicle
(motorcycle, moped) 20.00

Overnight parking surcharge, per semester 60.00
(employees and students living in residence halls are exempt)

Section 42201 of Title V, 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 Disabled Student Services Office (Student Services, Room 1661).

MISCELLANEOUS FEES

(Fees payable when service is rendered.)

Application for admission or readmission (nonrefundable), payable by check or money order at time application is made.....	\$55.00
Late registration (nonrefundable) (Refer to Class Schedule for dates when this fee will be assessed.)	25.00
Late course forgiveness	20.00
Failure to meet administratively required appointment or time limit (late fee)	20.00
Registration installment payment plan service charge	33.00
Tuition (Foreign or Out-of-State) installment payment plan service charge	Equal to 15 percent of each installment payment
Photo-identification card (One-time cost to both new undergraduate and graduate students at time of registration.) Valid only when accompanied by current semester Fee sticker. Non-refundable.	5.00
Lost photo identification card	
Photo I.D. Card replacement	10.00
Transcript of record (official or unofficial)	4.00
Second through tenth transcript, prepared at the same time as the first	each 2.00
Additional copies over ten, prepared at the same time ...	each 1.00
AFROTC deposit (Unexpended portion is refundable.).....	75.00
Check returned for any cause*	20.00
Loss of or damage to library materials	Replacement cost plus \$8.00 service charge
Commencement fee (Paid only at time of initial filing.).....	16.00
Graduation evaluation and diploma fee.....	16.00
(You must pay this fee for each graduation date requested.)	
Diploma replacement fee	12.00
Document copying fee	1.00
Credential application fee**	70.00
Credential evaluation fee	25.00
Musical instrument and audio/visual equipment fee	20.00
Lock and locker fee (optional)	1.00
Towel fee (optional)	4.00
Lost key fee (per key).....	10.00
Miscellaneous instructional course charge	As established and approved

* Late fee also charged when applicable.
 ** Established by and payable to the Commission on Teacher Credentialing.

MISCELLANEOUS INSTRUCTIONAL COURSE CHARGES

Miscellaneous instructional course charges are payable for the following courses:
 Art 225, 325, 425, 525, 526, 625, 627, 700D.
 Educational Technology 532, 540, 541, 544, 572, 644, 671, 775.
 Exercise and Nutritional Sciences 116A-116B, 119A-119B, 124, 138, 145, 146, 147, 320, 320L, 323, 323L, 324, 324L.
 Nutrition 205, 301, 302L, 405.

CREDIT CARDS

The University Cashiers Office does not accept credit cards for payment of registration fees or tuition (foreign or out-of-state) except as applicable under the terms of the Installment Plan. MasterCard, Visa, and Discover Card charge cards are accepted for other payments, such as housing, parking, health services, continuing education, and miscellaneous over-the-counter payments. Students are reminded that banks will provide cash advances against credit cards if needed to cover registration payments. Most ATM cards are also accepted for payment of miscellaneous charges. Additional information is available from the University Cashiers Office.

LIABILITY FOR PAYMENT

Whether or not an invoice is received from the University, students are liable for payment of all registration fees related to **units held on or added after the close of business on the fourteenth day** following the commencement of instruction. Foreign and out-of-state students are liable for tuition related to all units held, except as provided for by the refund policy.

All continuing students participating in *RegLine* must make registration payments by the deadline as instructed.

Nonresident (foreign and out-of-state) tuition must be paid prior to the first day of classes. With the exception of doctoral students and students enrolling for 799A or 799B only, **foreign** students must pay or sign an installment agreement for a minimum of 6 units at the time of registration. **Foreign** students wishing to pay fewer than 6 units must submit written approval to do so from the International Students Office or the Graduate Division, as applicable.

IT IS THE STUDENT'S RESPONSIBILITY TO BE AWARE OF TOTAL FEES AND TUITION DUE. Legal residents of California are not charged nonresident tuition. Additional fees that may become due as a result of units added during the semester must be paid at the Cashiers Office at the time the units are added. Note fee schedule above. **LATE PAYMENTS FOR FEES AND TUITION ARE SUBJECT TO AN ADDITIONAL LATE FEE AND APPLICABLE SERVICE CHARGES.**

DISHONORED CHECK

If your check is returned or not accepted by the bank for ANY REASON, you will be billed for the \$20.00 dishonored payment charge and the \$20.00 late fee when applicable. Nonpayment of fees or tuition 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 from those individuals who have previously had items returned unpaid by their bank.

REFUND OF FEES

Details concerning fees which may be refunded, the circumstances under which fees may be refunded, and the appropriate procedure to be followed in seeking refunds may be obtained by consulting Section 42201 (parking fees), 41913 (nonresident tuition), 42019 (housing charges), and 41802 (all other fees) of Title 5, *California Code of Regulations*. In all cases it is important to act quickly in applying for a refund. Information concerning any aspect of the refund of fees may be obtained from the Cashiers Office.

Refund of Registration Fees

REFUNDS ARE NOT AUTOMATIC. WHETHER OR NOT YOU RECEIVE CLASSES THROUGH THE REGISTRATION PROCESS, YOU MUST APPLY FOR THE REFUND BY THE REFUND DEADLINE.

Refunds may be applied against other amounts due the University.
Complete Withdrawal. To be eligible for refund of registration fees, a student withdrawing completely from the University (from *all* classes) MUST file a refund application with the Office of Admissions and Records at the time the withdrawal is requested, not later than 14 days following the commencement of instruction (Refund Deadline). All but \$5.00 will be refunded less any amount due to the University. (See Class Schedule for deadline dates. Note that the refund deadline is *prior* to the deadline set by Admissions and Records for official withdrawal.)

Fees Based on Unit Load. A student dropping from 6.1 units or more to 6.0 units or less, or a student who paid maximum fees but never obtained over 6.0 units, MUST file a refund application with the Cashiers Office, Student Services, Room 2620, not later than 14 days following the commencement of instruction (Refund Deadline). Application for full-time to part-time refunds may also be submitted at the Aztec Center Information Booth. All but \$5.00 will be refunded less any amount due to the University. **FOR ADDITIONAL INFORMATION, CONTACT THE CASHIERS OFFICE OR TELEPHONE (619) 594-5253.**

Schedule of Fees

Disqualified and Leave of Absence Candidates. If your registration has been canceled due to disqualification or by obtaining an approved leave of absence, registration fees will be refunded upon (1) notification from Admissions and Records that appropriate action has been taken and (2) return of your fee sticker and **application for refund** to the Cashiers Office.

Refund of Registration Fees to Title IV Financial Aid Recipients

The following refund policy applies to students receiving financial aid from these Title IV programs:

- William D. Ford Federal Direct Loan
- Federal Direct Plus Loan
- Federal Perkins Loan
- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant (FSEOG)

The Higher Education Amendments of 1992 (Reauthorization) require that a pro rata refund be made if a student receiving Title IV funds withdraws completely on or before the 60 percent point of the enrollment period and is in their first term of attendance at this University. At SDSU, pro rata refunds will apply after the Refund Deadline. Calculations will be based on the withdrawal date and the percent of time remaining in the semester, rounded down to the nearest ten percent of that period. In addition, an administrative fee, the lesser of 5 percent of the fees to be refunded or \$100.00, will be deducted. No fees shall be refunded when the date of the student's withdrawal is

after the 60 percent point in the semester. As required by law and determined by the University, if Title IV funds have been disbursed to the student during the enrollment period, refunds will first be returned to the Title IV programs in the order listed above. Examples of refund calculations are available upon request at the University Cashier's Office.

Refund of Nonresident (Foreign and Out-of-State) Tuition

REFUNDS ARE NOT AUTOMATIC. WHETHER OR NOT YOU RECEIVE CLASSES THROUGH THE REGISTRATION PROCESS, YOU MUST APPLY FOR THE REFUND. You may also apply for tuition refunds at the Aztec Center Information Booth.

Tuition paid for a course scheduled to continue for an entire semester may be refunded less any amount due to the University in accordance with the following schedule, if application is received by the Cashiers Office within the following time limits:

<i>Time Limit</i>	<i>Amount of Refund</i>
(1) Before or during the first week of the semester	100 percent of fee
(2) During the second week of the semester	90 percent of fee
(3) During the third week of the semester	70 percent of fee
(4) During the fourth week of the semester	50 percent of fee
(5) During the fifth week of the semester	30 percent of fee
(6) During the sixth week of the semester	20 percent of fee

Refund of Parking Fees

This schedule of refunds refers to calendar days, commencing on the date of the term when instruction begins.

Nonreserved space per semester:

<i>Period</i>	<i>Amount of Refund</i>
First 3 days of class	100 percent of fee
Day 4 through Day 14 (Registration Fee Refund Deadline).....	75 percent of fee
Day 15 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 or a receipt indicating that the permit was removed from the vehicle by a University Police Officer (Information Booth, Campanile Drive) must be turned in to the Cashiers Office at the time you file your refund application. Refund applications are available at the Cashiers Office. 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. See registration materials provided by Admissions and Records for details. The registration process is not complete until all fees due are paid and you are officially enrolled in classes through Admissions and Records.

APEALS PROCESS – UNIVERSITY CASHIERS OFFICE

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 the University Cashiers Office. Petitions must be filed with the University Cashiers Office **prior to the end of the twelfth week of classes**.

Petitions for refunds filed beyond the appropriate refund deadline are approved only when applicants are unable to continue their enrollment for one of the following reasons: compulsory military service; administrative error; campus regulation; or physical disability or death.

SUMMER SESSION FEES

Refer to Summer Sessions Bulletin for schedule of fees.

Parking fees (nonreserved spaces) (per week) \$6.00

EXTENSION COURSE FEES

Refer to Extended Studies Bulletin 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 fees and tuition paid or waived under provisions of these respective programs. See Class Schedule for instructions regarding deadlines for submission of documents to University Cashiers.

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 \$3 fee). Participants must apply for admission during the regular application filling 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 and Records.

ALAN PATTEE SCHOLARSHIPS

Children of deceased public law enforcement or fire suppression employees who were California residents and who were killed in the course of law enforcement or fire suppression duties are not charged fees or tuition of any kind at any California State University campus, according to the Alan Pattee Scholarship Act, *California Education Code*, Section 68121. Students qualifying for these benefits are known as Alan Pattee scholars. For further information contact the Office of Admissions and Records, which determines eligibility.

Procedure for the Establishment or Change of a Student Activity Fee

The law governing The California State University provides that a student activity fee may be established by student referendum with the approval of two-thirds of those students voting. The Student Activity Fee was established at San Diego State University by student referendum in 1955. The same fee can be increased or decreased by a similar two-thirds approval of students voting on a referendum called for by a petition signed by 10 percent of the regularly enrolled students (*California Education Code*, Section 89300). An increase or decrease in the student activity fee may be approved by the Chancellor only following a referendum on the fee increase approved by a majority of students voting. Student activity fees support a variety of cultural and recreational programs, child care centers, and special student support programs.

Debts Owed to the Institution

Should a student or former student fail to pay 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). For example, the institution may withhold permission to send official transcripts of grades for any person owing a debt. In addition, failure to pay debts to the University when due may result in the debt being sent to a collection agency. Should the debt be referred to a collection agency, the student will be responsible for costs incurred by the University, its Agents, Contractors and Assigns in the collection of the delinquent obligation. It may further result in notification of the delinquency to credit bureau organizations.

If a student believes that he or she does not owe all or part of an unpaid obligation, the student should contact the University Cashiers Office. The Cashiers Office, or another office on campus to which the student may be referred by the Cashiers Office, will review the pertinent information, including information the student may wish to present, and will advise the student of its conclusions with respect to the debt.

Organization and Administration

The California State University
Board of Trustees
Office of the Chancellor

San Diego State University
Administration
Colleges, Schools,
Departments, Programs
Auxiliary Organizations

The California State University

The individual California State Colleges were brought together as a system by the Donahoe Higher Education Act of 1960. In 1972 the system became The California State University and Colleges and in 1982 the system became The California State University. Today the campuses of the CSU include comprehensive and polytechnic universities and, since July 1995, the California Maritime Academy, a specialized campus.

The oldest campus—San Jose State University—was founded in 1857 and became the first institution of public higher education in California. The most recently opened campus—California State University, Monterey Bay, began admitting students in the fall of 1995. A new site has been conveyed and a 23rd campus,—California State University, Channel Islands—is being formally established in Ventura County.

Responsibility for The California State University is vested in the Board of Trustees, whose members are appointed by the Governor. The Trustees appoint the Chancellor, who is the chief executive officer of the system, and the Presidents, who are the chief executive officers of the respective campuses.

The Trustees, the Chancellor, and the Presidents develop system-wide policy, with actual implementation at the campus level taking place through broadly based consultative procedures. The Academic Senate of The California State University, made up of elected representatives of the faculty from each campus, recommends academic policy to the Board of Trustees through the Chancellor.

Academic excellence has been achieved by The California State University through a distinguished faculty, whose primary responsibility is superior teaching. While each campus in the system has its own unique geographic and curricular character, all campuses, as multipurpose institutions, offer undergraduate and graduate instruction for professional and occupational goals as well as broad liberal education. All of the campuses require for graduation a basic program of "General Education Requirements," regardless of the type of bachelor's degree or major field selected by the student.

The CSU offers more than 1,600 bachelor's and master's degree programs in some 240 subject areas. Many of these programs are offered so that students can complete all upper division and graduate requirements by part-time, late afternoon and evening study. In addition, a variety of teaching and school service credential programs are available. A limited number of doctoral degrees are offered jointly with the University of California and with private institutions in California.

Enrollments in fall 1997 totaled nearly 344,000 students, who were taught by over 18,000 faculty. The system awards more than half of the bachelor's degrees and 30 percent of the master's degrees granted in California. Some 1.7 million persons have been graduated from CSU campuses since 1960.

Average Annual Cost of Education and Sources of Funds per Full-time Equivalent Student

The 23 campuses and the Chancellor's Office of The California State University are financed primarily through funding provided by the taxpayers of California. The total State appropriation to the CSU for 1998/99 (not including capital outlay funding in the amount of \$221,547,000) is \$2,164,046,000. However, the total cost of education for CSU, is \$2,918,347,067, which must provide support for a projected 268,320 full-time equivalent students (FTES). The number of full-time

equivalent students is determined by dividing the total academic student load by 15 units per term (the figure used here to define a full-time student's academic load).

The total cost of education in the CSU is defined as 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, but excluding capital outlay appropriations and lottery funds. The average cost of education is determined by dividing the total cost by the total FTES. The average cost is further differentiated into three categories: State Support (the State appropriation, excluding capital outlay), Student Fee Support, and Support from Other Sources (including Federal Funds).

Thus, excluding costs that relate to capital outlay, the average cost of education per FTE student is \$10,876. Of this amount, the average student fee support per FTE is \$2,263. (The State University Fee, application fee, and nonresident tuition are included in the average costs paid by the students; individual students may pay less or more than \$2,263, depending on whether they are part-time, full-time, resident, or nonresident students.)

1998/99	Amount	Average Cost Per FTE	
		Student	Percentage
Total Cost of Education*	\$2,918,347,067	\$10,876	100.0
–State Appropriation*	2,164,046,000	8,064	74.2
–Student Fee Support	592,496,191	2,208	20.3
–Support from Other Sources	162,155,184	604	5.6
Detail:			
Total State Support	\$2,164,046,000		
(including capital outlay)			
Total Support	\$2,918,347,067		

(Including State General Fund appropriation, student fee support, and support from other sources)

* Based on final campus budget submissions subsequent to the passage of the Budget Act. Totals may differ slightly from other CSU published amounts.

* Includes supplemental appropriations of \$17.8 million for a 1 percent increase in employee compensation; \$11.5 million for teacher preparation activities; \$77 million in one-time funding for critical need areas (instructional equipment replacement, technology support, libraries, deferred maintenance, teacher recruitment, and distance learning); and \$4 million to expand successful CSU student outreach programs. Also includes \$60,861,000 that will be removed as the result of a reduction in retirement rate contributions.

Trustees of The California State University

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Governor of California	Sacramento 95814
The Honorable Cruz Bustamante	State Capitol
Lieutenant Governor of California	Sacramento 95814
The Honorable Antonio Villaraigosa	State Capitol
Speaker of the Assembly	Sacramento 95814
The Honorable Delaine Eastin	721 Capitol Mall
State Superintendent of Public Instruction	Sacramento 95814
Dr. Charles B. Reed	400 Golden Shore
Chancellor of	Long Beach 90802-4275
The California State University	

Office of the Chancellor The California State University

400 Golden Shore
Long Beach, California 90802-4275
Telephone: (562) 985-2500

Dr. Charles B. Reed	Chancellor—CSU System
Dr. David S. Spence.....	Executive Vice Chancellor
Dr. Charles W. Lindahl	Associate Vice Chancellor, Academic Affairs
Mr. Samuel A. Strafaci	Interim Senior Director, Human Resources
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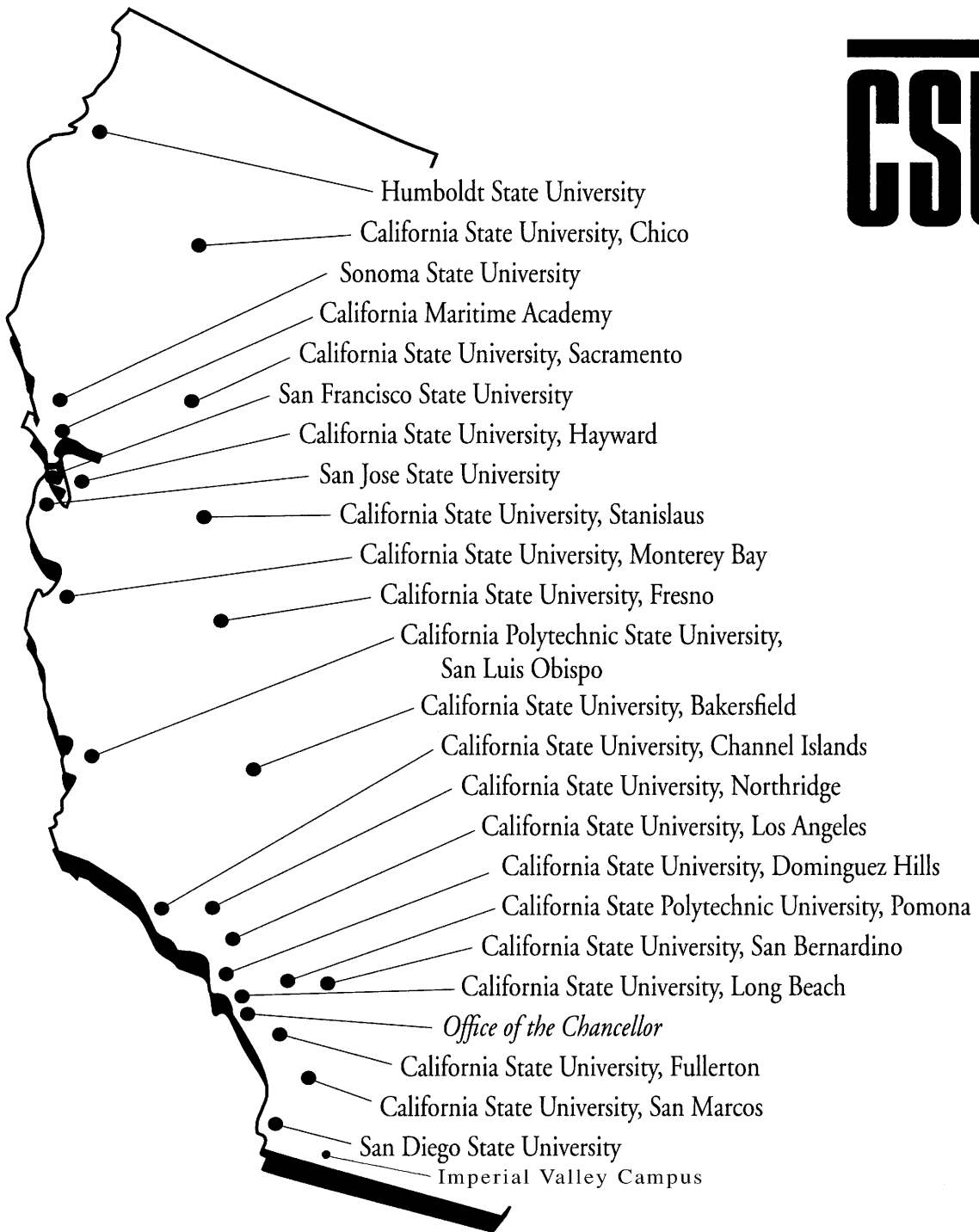
Appointed Trustees

Appointments are for a term of eight years, except for a student Trustee, an alumni Trustee, and a faculty Trustee, whose terms are for two years. Terms expire in the year in parentheses. Names are listed in order of appointment to the Board.

Mr. Ronald L. Cedillos (1999)
Mr. Jim Considine (1999)
Mr. Robert G. Foster (1999)
Dr. Harold Goldwhite (1999)
Mr. Eric C. Mitchell (1999)
Dr. Joan Otomo-Corgel (2000)
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Ms. Alice S. Petrossian (2005)
Mr. Anthony M. Vitti (2005)
Mr. James H. Gray (2006)

Correspondence with Trustees should be sent:

c/o Trustees Secretariat
The California State University
400 Golden Shore, Suite 134
Long Beach, CA 90802-4275



The California State University

The California State University

California State University, Bakersfield
9001 Stockdale Highway
Bakersfield, California 93311-1099
Dr. Tomás A. Arciniega, President
(805) 664-2011

California State University, Channel Islands
P.O. Box 2862
Camarillo, California 93011-2862
Mr. J. Handel Evans, President
(805) 383-8400

California State University, Chico
1st & Normal Streets
Chico, California 95929-0150
Dr. Manuel A. Esteban, President
(530) 898-6116

California State University, Dominguez Hills
1000 East Victoria Street
Carson, California 90747-0005
Dr. Herbert L. Carter, President (Interim)
(310) 243-3300

California State University, Fresno
5241 North Maple Avenue
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Dr. John D. Welty, President
(559) 278-4240

California State University, Fullerton
800 N. State College Boulevard
Fullerton, California 92634-9480
Dr. Milton A. Gordon, President
(714) 278-2011

California State University, Hayward
25800 Carlos Bee Boulevard
Hayward, California 94542
Dr. Norma S. Rees, President
(510) 885-3000

Humboldt State University
Arcata, California 95521-8299
Dr. Alistair W. McCrone, President
(707) 826-3011

California State University, Long Beach
1250 Bellflower Boulevard
Long Beach, California 90840-0115
Dr. Robert C. Maxson, President
(562) 985-4111

California State University, Los Angeles
5151 State University Drive
Los Angeles, California 90032
Dr. James M. Rosser, President
(323) 343-3000

California Maritime Academy
200 Maritime Academy Drive
Vallejo, California 94590
Mr. Jerry A. Aspland, President (Interim)
(707) 654-1000

California State University, Monterey Bay
100 Campus Center
Seaside, California 93955-8001
Dr. Peter P. Smith, President
(831) 582-3330

California State University, Northridge
18111 Nordhoff Street
Northridge, California 91330
Dr. Blenda J. Wilson, President
(818) 677-1200

California State University, Sacramento
6000 J Street
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Dr. Donald R. Gerth, President
(916) 278-6011

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5500 University Parkway
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Turlock, California 95380
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San Luis Obispo, California 93407
Dr. Warren J. Baker, President
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Imperial Valley Campus
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Calexico, California 92231
(760) 768-5500

San Francisco State University
1600 Holloway Avenue
San Francisco, California 94132
Dr. Robert A. Corrigan, President
(415) 338-1111

San Jose State University
One Washington Square
San Jose, California 95192-0001
Dr. Robert L. Caret, President
(408) 924-1000

Sonoma State University
1801 East Cotati Avenue
Rohnert Park, California 94928-3609
Dr. Ruben Armñana, President
(707) 664-2880

San Diego State University

San Diego State University was founded on March 13, 1897 for the training of elementary school teachers. The seven faculty and ninety-one students of the then Normal School's first class met on November 1, 1898 in temporary quarters downtown while the first unit of the main building of the campus was under construction at Park Boulevard where El Cajon Boulevard begins.

The curriculum was limited at first to English, history and mathematics, but it broadened rapidly under the leadership of Samuel T. Black, who left the position of State Superintendent of Public Instruction to become the first President (1898-1910).

Under the vigorous administration of the second president, Edward L. Hardy (1910-1935), the School was reorganized as a four-year State Teachers' College in 1921, and control was transferred from a local board of trustees to the State Board of Education. In the same year, the two-year San Diego Junior College, the antecedent institution to the present Community Colleges, was incorporated as a branch of San Diego State, where it remained through 1946.

It became clear early that the only collegiate institution in San Diego would soon outgrow its 17-acre site, and a campaign was begun in the 1920s to build a new campus. The Legislature agreed, provided the city furnish a new site and buy the old one. In 1928 the electorate approved the present campus on what was then the far eastern border of the city.

In February 1931, the college moved to the seven mission-style buildings surrounding what is still called the Main Quad. In 1935, the Legislature removed the word "Teachers" from the name of the institution and authorized the expansion of degree programs into areas other than teacher preparation. In the same year, Walter R. Hepner (1935-1952) was appointed president, and the institution entered a period of slow growth and then, with the coming of war, of contraction. At the end of World War II, enrollment had fallen to 1,918.

In the next quarter century, under Dr. Hepner and subsequently under Malcolm A. Love (1952-1971), enrollments increased phenomenally to over 25,000 students. In 1960, the College became a part of the newly created California State College system, under a statewide Board of Trustees and a Chancellor. In 1971, recognizing that the institution had in fact achieved the status of a university, the Legislature renamed the system The California State University and Colleges, and shortly afterward renamed this institution San Diego State University.

Acting President Donald E. Walker (1971-1972), President Brage Golding (1972-1977), Acting President Trevor Colbourn (1977-1978), and President Thomas B. Day (1978-1996) were followed by the seventh President Stephen L. Weber (1996-).

Today, San Diego State University is classified by the Carnegie Foundation as a Doctoral University II. With over 28,000 students, it is one of the largest universities in the western United States.

SDSU is a teaching university with strong research programs. Research and scholarship strengthen the instruction SDSU students receive in the classroom and laboratory. SDSU's faculty conducts more than \$90 million in funded research each year. These projects provide unusual opportunities for students who can work alongside faculty using the latest equipment. The excitement of discovery spreads to the classroom, creating a unique learning experience.

Accommodation for students is furnished in new and continually improved physical facilities. The campus currently encompasses over 5.3 million square feet in academic and support facilities. Included are the award winning Aztec Center, the first student union building in the CSU system; the Dramatic Arts building containing the Don Powell Theatre; the Music building with its Smith Recital Hall; and the newly renovated and improved Malcolm A. Love Library containing over one million volumes in 520,000 square feet. Student Health Services, Art and Humanities classroom buildings as well as modern residence halls

and parking facilities for 12,500 cars have been added to complement the campus infrastructure. The original historic structures, Hepner Hall, Little Theater, Hardy Tower, Speech and Telecommunications, and Exercise and Nutritional Sciences buildings which renovated during the 1970's and 80's.

Several recent construction projects have enhanced the service to students by consolidating all student needs in a new complex of Student Service facilities with a prominent clock tower as its focal point. A major addition to the library with its domed entry complements these facilities, and with its newly landscaped grounds, creates a park-like atmosphere at the core of the campus. In the past five years a new Gateway Center was constructed to house the campus public television station, KPBS and the College of Extended Studies. An International Student Center and Aztec football complex were also added in the early 90's.

The 12,000 seat Cox Arena, the Aztec Recreation Center, and the 3,000 seat Tony Gwynn Baseball Stadium were completed in 1997, bringing increased recreational opportunities to students. A complete renovation to the main food service facility, East Commons, provides new and improved dining opportunities to the campus. A major science laboratory building for chemistry and geological sciences is under construction.

The University now offers bachelor's degrees in 75 areas, the master's in 57, and the doctorate in 11.

There are five multidisciplinary honor societies on campus that help to reinforce the high academic standards of the campus. They include Golden Key, Mortar Board, Phi Beta Kappa, Phi Eta Sigma, and Phi Kappa Phi. In addition, there are a number of disciplinary honor societies that recognize superior scholarship and leadership in specific academic fields.

Mission and Goals of San Diego State University

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

San Diego State University provides an environment that encourages the intellectual development of students. Its undergraduate and graduate programs in the liberal arts and sciences are designed to help students learn about themselves, their cultural and social heritage, and their physical environment. Additionally, students are challenged to understand how advances in these areas may influence their present lives and their futures. Professional programs, while including many of these broad goals, are designed to meet the needs of the students who seek specific employment in many diverse fields. The University is concerned with developing leaders in cultural, economic, educational, scientific, social, and technical fields.

Closely related to the teaching mission of the University is student and faculty research. Involvement in research ensures that both students and faculty maintain currency in their disciplines and fosters the advancement of knowledge. Graduate study at San Diego State University at the master's and doctoral levels emphasizes creative scholarship, original research, and the development and utilization of research techniques.

Located in a large and ethnically diverse metropolitan center bordering Mexico and on the Pacific Rim, the University uses the social, cultural, scientific, and technical resources of this region to enrich its teaching and research programs. Through its teaching, research, and service, 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. The University also seeks cooperative programs with other institutions of higher education both in the United States and abroad.

Shared Vision

San Diego State University pursues its mission and goals through Shared Vision, a community-wide conversation out of which five goals were identified by a broad cross section of faculty, staff, students, administrators, alumni, parents, and community leaders: 1) academic excellence in all SDSU's programs and offerings; 2) educational opportunities for the whole person both inside and outside the classroom; 3) the appreciation of diversity in its many manifestations and social justice within the university community; 4) the wise use of our precious human and fiscal resources; and 5) an international institution where students become global citizens.

San Diego State University Principal Officers of Administration

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 Provost and Vice President for Academic Affairs Nancy A. Marlin
 Vice President for Business and Financial Affairs Sally F. Roush
 Vice President for Student Affairs Daniel B. Nowak
 Vice President for University Advancement Theresa M. Mendoza
 Vice President for Research and Dean of the Graduate Division James W. Cobble

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 Executive Assistant to the President Barbara W. Hartung
 Director of Diversity and Equity Susan L. Moss

Office of the Vice President for Academic Affairs
 Associate Vice President for Academic Affairs Ethan A. Singer
 Special Assistant Ernst C. Griffin
 Associate Vice President for Faculty Affairs Dean O. Popp
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 Assistant Vice President for International Programs Alan R. Sweedler (Acting)
 Dean of the Library Karen Kinney (Interim)
 Director of Institutional Research Kimberly Wright Sinha
 Director of Instructional Technology Services David M. Sharpe
 Principal Coordinator Distributed Learning Treacy Lau
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 Director of Facilities Planning and Management W. Anthony Fulton
 Director of Internal Review and Business Information Systems Ellene J. Gibbs
 Director of Physical Plant Martin E. Holzman, Jr.
 Director of Public Safety John J. Carpenter
 Director of Environmental Health and Safety M. C. Hull

Office of the Vice President for Student Affairs
 Associate Vice President for Student Affairs Carl F. Emerich
 Assistant Vice President for Student Affairs Sharon L. Edwards
 Assistant Vice President for Student Affairs Nancy C. Sprotte (On Leave)
 Assistant Vice President for Student Enrollment Services William D. Boyd
 Ombudsmen, Program Coordinator Susan Chappellet
 Records Officer and Judicial Coordinator Michael A. Car
 Student Affirmative Action Officer Augustine S. Chavez
 Director of Disabled Student Services Elizabeth A. Bacon
 Director of Student Resource Center Terry Hanten
 Director of Admissions and Records Carolyn Marland (Interim)
 Director of Student Outreach Services Gonzalo G. Rojas
 Director of Educational Opportunity and Ethnic Affairs Augustine S. Chavez
 Director of Financial Aid William D. Boyd
 Director of Career Services Judith G. Gumbiner
 Director of Compliance and Policy Analysis Martin J. Block
 Director of Counseling and Psychological Services Douglas J. Van Sickle
 Director of International Student Services Ron Moffatt
 Director of Student Health Services Kevin Patrick, M.D.
 Director of Housing and Residential Life Michael B. Hoctor
 Director of Scholarship Kathleen H. Ross
 Director of Test Office Michael A. Irwin
 Director of Center for Community-based Learning Garold L. Tisue

Office of the Vice President for University Advancement	
Associate Vice President for Marketing and Communication	Sara Muller
Assistant Vice President for Operations	Kim Hill
Director of University Development	Robert Alber
Executive Director of Alumni Association	Lance Burchett
Director of Alumni/Donor Information Management Systems	Keith Benton
Director of University Communications	Rick Moore
Director of Planned Giving	Patricia Moulton
Director of Corporate and Foundation Relations	Julie Wilson
Office of the Vice President for Graduate and Research Affairs	
Associate Vice President for Research and Technology Services	Lawrence B. Feinberg
Associate Vice President for Community Services	Janis F. Andersen
Associate Dean for Student Services	Zac Hanscom, III
Director of Intercollegiate Athletics	Rick Bay
President of Aztec Athletic Foundation	Sharon Burgence

Colleges, Schools, Departments, and Programs

COLLEGE OF ARTS AND LETTERS	Paul J. Strand, Dean
Associate Dean	Carol O. Sweedler Brown
Assistant Dean for Student Affairs	Leslie S. Johnson
Assistant Dean for Development	Barbara London
Departments	<i>Chair or Director</i>
Africana Studies	Charles P. Toombs
American Indian Studies	Linda S. Parker
Anthropology	Ronald S. Himes
Asian Studies	Murugappa C. Madhavan
Chicana and Chicano Studies	Ricardo Griswold del Castillo
Classics and Humanities	E. N. Genovese
Economics	Mark A. Thayer
English and Comparative Literature	Carey G. Wall
French and Italian Languages and Literatures	
Geography	Edward Aguado
German and Russian Languages and Literatures	
History	Harry C. McDean
Linguistics and Oriental Languages	Soonja Choi
Philosophy	Thomas S. Weston
Political Science	Harlan J. Lewin
Religious Studies	Irving Alan Sparks
Rhetoric and Writing Studies	
Sociology	James L. Wood
Spanish and Portuguese Languages and Literatures	Theodore V. Higgs
Women's Studies	Susan E. Cayleff
Programs	
Africa and Middle East Studies	David H. Johns
American Studies	David V. DuFault
Environment and Society	Philip R. Pryde
European Studies	E.N. Genovese
International Business	Steven J. Loughrin-Sacco
International Security and Conflict Resolution	David H. Johns

Judaic Studies	Lawrence Baron
Latin American Studies	Thomas M. Davies, Jr.
M.A., Liberal Arts	Howard I. Kushner
MEXUS	Teresa Cisneros Donahue
Russian and Central European Studies	Veronica Shapovalov
Social Science	Albert C. O'Brien
Urban Studies	Roger W. Caves

COLLEGE OF BUSINESS

ADMINISTRATION	Michael L. Hergert, Dean
Associate Dean and Director of Graduate Program	Kenneth E. Marino
Associate Dean and Director of Undergraduate Program	Robert W. Wilbur
Associate Dean, Community Economic Development	Harold K. Brown
Assistant Dean for Student Affairs	Patricia N.L. Dintrone
Assistant Dean for Student Relations	Jeffrey W. Glazer
Director of Communications	Sara Scott
Director of Development	Christine A. Audette
Departments and Schools	<i>Chair or Director</i>
Accountancy	Andrew H. Barnett
Finance	Nikhil P. Varaiya
Information and Decision Systems	John M. Penrose
Management	Mark C. Butler
Marketing	George E. Belch
Programs	
International Business	Steven J. Loughrin-Sacco
MEXUS	Teresa Cisneros Donahue

COLLEGE OF EDUCATION	Gordon M. Thompson, Interim Dean
Associate Dean	Margie K. Kitano (Interim)
Associate Dean for Faculty Development and Research	Katherine Randazzo (Interim)
Assistant Dean for Student Affairs	Barbara E. Allen
Doctoral Programs	Daniel J. Kitchen
Director of Center for Careers in Education	Helen Duffy
Director of Development	Carolyn Warne
Director of Support Services	John R. Summerfruit
Departments and Schools	<i>Chair or Director</i>
Administration, Rehabilitation and Postsecondary Education	Fred R. McFarlane
Counseling and School Psychology	Emery J. Cummins
Educational Technology	Patrick J. Harrison
Policy Studies in Language and Cross-Cultural Education	Alberto M. Ochoa
Special Education	Eleanor W. Lynch
Teacher Education	Pamela J. Ross

COLLEGE OF ENGINEERING	Pieter A. Frick, Dean
Associate Dean	
Assistant Dean for Student Affairs	Nicholas Panos
Assistant Dean for Research and Graduate Programs and Director of Doctoral Program	John G. Pinto
Director of Development	Pamela Becker
Departments	<i>Chair or Director</i>
Aerospace Engineering and Engineering Mechanics	Joseph Katz
Civil and Environmental Engineering	Janusz C. Supernak
Electrical and Computer Engineering	Andrew Y. J. Szeto
Mechanical Engineering	Ronald Kline

COLLEGE OF HEALTH AND

HUMAN SERVICES Dolores A. Wozniak, Dean
 Associate Dean Olita D. Harris
 Assistant Dean for Student Affairs Kenneth M. Golden
 Assistant Dean for International Affairs Tarek Shuman
 Director of Development Kathy Druccquer Duff

Departments and Schools *Chair or Director*
 Communicative Disorders Steven J. Kramer
 Graduate School of Public Health Kenneth J. Bart
 Nursing Patricia R. Wahl
 Social Work Anita S. Harbert

Program

Gerontology E. Percil Stanford

COLLEGE OF PROFESSIONAL STUDIES

AND FINE ARTS Joyce M. Gattas, Dean
 Associate Dean Hayes L. Anderson
 Assistant Dean for Student Affairs Carole A. Robasciotti
 Assistant Dean for Development James Brozo

Departments and Schools *Chair or Director*
 Aerospace Studies Col. Carter A. Borland
 Art, Design and Art History Fredrick J. Orth
 Child and Family Development Carolyn K. Balkwell
 Communication Michael R. Real
 Exercise and Nutritional Sciences B. Robert Carlson
 Military Science Lt. Col. Arthur R. Roberts
 Music and Dance Martin J. Chambers
 Naval Science Capt. Jerry B. Singleton
 Public Administration and Urban Studies Louis M. Rea
 Recreation, Parks and Tourism Jesse T. Dixon
 Theatre Alicia M. Annas

Programs

International Security and Conflict
 Resolution David H. Johns
 Urban Studies Roger W. Caves

COLLEGE OF SCIENCES Stephen B. W. Roeder, Interim Dean

Associate Dean Rebecca B. Bryson
 Associate Dean Paul J. Paolini, Jr.
 Assistant Dean for Student Affairs Catherine J. Atkins-Kaplan
 Assistant Dean for
 Underrepresented Student Programs Lawrence J. Alfred
 Assistant Dean for Faculty Development Robert S. Pozos
 Director of Development

Departments *Chair or Director*

Astronomy Ronald J. Angione
 Biology Sanford I. Bernstein
 Chemistry Dale A. Chatfield
 Geological Sciences Gary H. Girty
 Mathematical and Computer Sciences John D. Elwin
 Physics Roger A. Lilly
 Psychology Frederick W. Hornbeck

Programs

Energy Studies Alan R. Sweedler
 International Security and Conflict Resolution David H. Johns
 Molecular Biology Greg L. Harris
 Oceanography Susan L. Williams
 Regulatory Affairs A. Stephen Dahms

IMPERIAL VALLEY CAMPUS Khosrow Fatemi, Dean

Associate Dean for Academic Affairs Alfred Merino
 Assistant Dean for Student Affairs Jeanette Shumaker
 Director of Library Services Frank Bruno
 Director of Financial and
 Business Services Irma Martinez
 Director of Advancement John Renison

OFFICE OF THE DEAN OF THE

GRADUATE DIVISION James W. Cobble, Dean
 and Vice President for Research

Associate Vice President for Research and
 Technology Services Lawrence B. Feinberg
 Associate Dean for Policy and Curriculum Janis F. Andersen
 Associate Dean for Student Services Zac Hanscom, III
 Assistant Dean for Student Services Arthur W. Schatz

OFFICE OF THE DEAN OF

UNDERGRADUATE STUDIES Carole A. Scott, Dean

Associate Dean
 Associate Dean Charles F. Hohm
 Assistant Dean Bonnie M. Anderson
 Director of University Advising Center Sandra Cook

OFFICE OF THE DEAN OF

EXTENDED STUDIES Paula Kelly, Interim Dean

Assistant Dean for Special Sessions and Extension
 Programs Larry G. Cobb
 Director of Extension Programs Jan Wahl
 Director of Professional Development Tamara McLeod
 Director of Certificate Programs Lori Glover
 Director of American Language Institute Clive Roberts
 Dean, Global Program Development William P. Locke
 Assistant Dean, Global Program
 Development Li-Rong Lilly Cheng
 Executive Director of International
 Training Center Miguel A. Cardenas
 Director of Global Telecommunications Center Zed Nashi

Auxiliary Organizations

San Diego State University Foundation

President Stephen L. Weber
 Vice President James W. Cobble
 General Manager Harry R. Albers

Aztec Shops, Ltd.

General Manager Harvey J. Goodfriend

The Associated Students of San Diego State University

President Celinda Vazquez
 Executive Director Dan Cornthwaite

General Information

General Information

Student Services

Financial Aid

Scholarships

Special Programs and Services

General Information

San Diego State University maintains and promotes a policy of nondiscrimination and nonharassment on the basis of race, religion, color, age, gender, disability, marital status, sexual orientation, and national origin.

The Office of Diversity and Equity is a University effort affecting every level of activity. The policy stands as a statement of this University's moral commitment to the right of all persons to equal opportunity in a non-discriminating, harassment-free atmosphere.

San Diego State University places high priority on that objective and expects all members of the University to support this policy fully.

Refer to the General Regulations section for the California State University policy pertaining to

Information concerning the academic programs of San Diego State University may be obtained from the Office of the Vice President for Academic Affairs, HH-114, (619) 594-6542, and may include:

1. The current degree programs and other educational and training programs;
2. The instructional, laboratory, and other physical plant facilities which relate to the academic program;
3. The faculty and other instructional personnel;
4. Data regarding student retention 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; and
5. The names of associations, agencies, or governmental bodies which accredit, approve, or license the institution and its programs, and the procedures under which any current or prospective student may obtain or review upon request a copy of the documents describing the institution's accreditation, approval, or licensing.

Information regarding special facilities and services available to students with disabilities may be obtained from Disabled Student Services, Student Services, Room 1661, (619) 594-6473.

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 Public Safety, Student Services, Room 1410, (619) 594-1991.

Information concerning San Diego State University annual campus security report may be obtained from Public Safety, Student Services, Room 1410, (619) 594-1991.

Information concerning the prevention of drug and alcohol abuse may be obtained from Counseling and Psychological Services, (619) 594-5220.

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 Ombudsmen, Student Services, Room 3635, (619) 594-6578.

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>.

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. 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.

Institutional and Financial Assistance Information

The following information concerning student financial assistance may be obtained from the Financial Aid Office, Student Services, Room 3605, (619) 594-6323.

1. Student financial assistance programs available to students who enroll at San Diego State University;
2. The methods by which such assistance is distributed among recipients who enroll at San Diego State University;
3. The means, including forms, by which application for student financial assistance is made and requirements for accurately preparing such applications;
4. The rights and responsibilities of students receiving financial assistance; and
5. The standards the student must maintain to be considered to be making satisfactory academic progress for the purpose of establishing and maintaining eligibility for financial assistance.

Information concerning San Diego State University policies regarding any refund due to the federal Title IV student assistance programs as required by the regulations is available from the Financial Aid Office, Student Services, Room 3605, (619) 594-6323.

The following information concerning the cost of attending San Diego State University is available from the Financial Aid Office, Student Services, Room 3605, (619) 594-6323.

1. Fees and tuition;
2. Estimated costs of books and supplies;
3. Estimates of typical student room and board costs and typical commuting costs; and
4. Any additional costs of the program in which the student is enrolled or expresses a specific interest.

Information concerning the refund policy of San Diego State University for the return of unearned tuition and fees or other refundable portions of costs is available from the University Cashiers Office, Student Services, Room 2620, (619) 594-5253.

Information concerning San Diego State University policies regarding any refund due to the federal Title IV student assistance programs as required by the regulations is available from the Financial Aid Office, Student Services, Room 3605, (619) 594-6323.

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.

Honors Council

The Honors Council was formed in 1991. It comprises representatives of the Honors Program and of Golden Key, Mortar Board, Phi Beta Kappa, Phi Eta Sigma, and Phi Kappa Phi 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 programs 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.

For meetings and events and to house honors insignia and regalia, the Honors Council has the Henry L. Janssen Honors Council Room in the Student Services, Room 1624. The telephone number is (619) 594-3130

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 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 National Honor Society has about 260 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. E. Nicholas Genovese, Department of Classics and Humanities.

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 200 active chapters with a membership in excess of 175,000.

Mortar Board membership means active involvement to benefit the campus and community. Current projects include presentation of annual emeritus faculty and staff Outstanding Service Awards to recognize individuals whose work contributed significantly to this university; an annual faculty/staff appreciation dinner; projects with the local schools; support of activities and projects of the San Diego Alumni Chapter; and the sale of the Mortar Board Datebook—a daily planning calendar and information booklet for the university community.

To be considered for election to membership, students must have senior standing for the fall semester with an overall GPA of 3.00 and 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. Ronald Young, Associate Professor of Spanish, Dr. E. Nicholas Genovese, Professor of Classics and Humanities; and Jessica Savalla, KPBS. The administrative liaison is Dr. Jane K. Smith, Assistant Vice President for Academic Services (HH-114).

Phi Beta Kappa, founded in 1776, is the oldest national honor society in America, with about 260 chapters. It recognizes academic excellence in the liberal arts and sciences. Nu chapter was established at SDSU in 1974, the first CSU campus to be so honored. Those considered for membership each Spring are usually enrolled in the College of Arts and Letters or the College of Sciences and are or will be eligible for the Bachelor of Arts or Bachelor of Science degree. They must have junior or senior status with both an overall GPA of 3.75 or better for juniors or 3.5 or better for seniors, and a GPA in liberal arts and sciences courses of 3.5 or better. These GPAs must be maintained with minimal use of Cr/NC. All candidates must have demonstrated university-level proficiency in mathematics and in a foreign language at the third semester level. In addition, juniors must have completed 75 units of liberal arts and sciences courses, and seniors must have completed at least 45 liberal arts and sciences upper division units at SDSU, and must have demonstrated university-level proficiency in written English as shown by coursework or satisfaction of the upper division writing competency requirement. Finally, candidates must show significant depth and breadth of scholarly interests as evidenced by the number, variety, and rigor of upper division courses taken outside the major. Election, after careful examination of the student's record, is by vote of the members of SDSU's Nu Chapter of Phi Beta Kappa.

Chapter activities include the annual initiation banquet, at which several scholarships are awarded; the annual Phi Beta Kappa Lecture honoring an outstanding faculty member; lectures by visiting scholars; active participation in the University Honors Council; supportive interaction with local schools; and cooperation with Epsilon Association, San Diego's alumni chapter of Phi Beta Kappa. Further information may be obtained from Professor Emeritus Henry Janssen, Department of Political Science, or Professor Barbara B. Hemmingsen, Department of Biology.

Phi Eta Sigma was established as a national society 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 260 chapters throughout the United States and more than 485,000 members.

All freshmen, both men and women, who have a cumulative grade point average of at least 3.5 on a 4.0 scale with at least 12 units at the close of either semester during their freshman year are eligible to join. Students who were eligible but missed induction after their freshman year may join at any time thereafter.

Among its activities are a topical lecture series, discussion groups, social events, and national conventions.

The faculty adviser is Carl F. Emerich, Associate Vice President, Student Affairs, (619) 594-5211.

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 thousand dollars in scholarships annually, the recognition of outstanding faculty and students through nominations for national awards and scholarships, spring initiation, and sponsorship of the SDSU Emeritus Lecture Series. The national organization publishes a newsletter and a scholarly journal and sponsors the National Scholar and National Artist awards and the Graduate Fellowship program. Nationally there are 275 active chapters. San Diego State University's chapter was chartered in 1965.

General Information

Membership is based on, but not limited to, the following criteria: Juniors must have completed a minimum of 75 units with a GPA of 3.60 overall and at SDSU; seniors must have completed a minimum of 90 units with a 3.50 GPA overall and at SDSU; graduate students must have completed a minimum of 15 units of graduate work at SDSU and have a GPA of 3.90 or better in graduate work overall and at SDSU. All prospective members must have made satisfactory progress toward the degree.

President of the society is Professor Gene G. Lamke, Department of Recreation, Parks and Tourism.

Disciplinary 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)
American Medical Student Association (Pre-Medical)
Beta Alpha Psi (Accountancy)
Beta Gamma Sigma (Business)
Chi Epsilon (Civil Engineering)
Eta Sigma Phi (Classics)
Honors Council (General)
Kappa Delta Pi (Education)
Phi Alpha Theta (History)
Phi Beta Delta (International Studies)
Phi Mu Alpha Sinfonia (Music)
Pi Delta Phi (French)
Pi Kappa Lambda (Music)
Pi Sigma Alpha (Political Science)
Pi Tau Sigma (Mechanical Engineering)
Psi Chi (Psychology)
Sigma Gamma Tau (Aerospace Engineering)
Sigma Iota Epsilon (Management)
Sigma Tau Delta (English)
Sigma Theta Tau (Nursing)
Tau Beta Pi (Engineering)

Accreditation

San Diego State University is accredited by the Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges, P.O. Box 9990, Mills College, Oakland, CA 94613-0990, (510) 632-5000. 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:

Accrediting Commission on Education for Health Services
Administration
1911 North Fort Myer Drive, Suite 503
Arlington, VA 22209-1603
(703) 524-0511

Accreditation Council for Graduate Medical Education
(Preventive Medicine Residency Program)
515 N. State Street, Suite 2000
Chicago, IL 60610
(312) 464-4972

American Association of Colleges for Teacher Education
One Dupont Circle, Suite 610
Washington, D.C. 20036-1186
(202) 293-2450

American Chemical Society
Committee on Professional Training
1155 Sixteenth Street, N.W.
Washington, D.C. 20036
(202) 872-4600

American College of Nurse-Midwives
818 Connecticut Avenue, N.W., Suite 900
Washington, D.C. 20006
(202) 728-9896

American Psychological Association (Clinical Psychology)
750 First Street, N.E.
Washington, D.C. 20002-4242
(202) 336-5500

American Speech-Language-Hearing
Association, Council on Academic Accreditation in
Audiology and Speech-Language Pathology
10801 Rockville Pike
Rockville, MD 20852
(301) 897-5700

California Commission on Teacher Credentialing
1812 Ninth Street
Sacramento, CA 95814-7000
(916) 445-0184

Computing Sciences Accreditation Board
(Computer Science)
Two Landmark Square, Suite 209
Stamford, CT 06901
(203) 975-1117

Council of Graduate Schools
One Dupont Circle, N.W., Suite 430
Washington, D.C. 20036-1173
(202) 223-3791

Council on Education of the Deaf
405 White Hall
Kent State University
Kent, OH 44242-0001
(330) 672-2294

Council on Education for Public Health
1015 Fifteenth Street, N.W.
Washington, D.C. 20005
(202) 789-1050

Council on Social Work Education
1600 Duke Street, Suite 300
Alexandria, VA 22314-3421
(703) 683-8080

Foundation for Interior Design Education Research
60 Monroe Center N.W., Suite 300
Grand Rapids, MI 49503-2920
(616) 458-0400

National Association of School Psychologists
4340 East West Highway, Suite 402
Bethesda, MD 20814
(301) 657-0280

National Association of Schools of Art and Design
11250 Roger Bacon Drive, Suite 21
Reston, VA 20190
(703) 437-0700

National Association of Schools of Music
11250 Roger Bacon Drive, Suite 21
Reston, VA 20190
(703) 437-0700

National Association of Schools of Public Affairs
and Administration
1120 G Street, N.W., Suite 730
Washington, D.C. 20005-3801
(202) 628-8965

National Association of Schools of Theatre
11250 Roger Bacon Drive, Suite 21
Reston, VA 20190
(703) 437-0700

National Council for Accreditation of Teacher Education
(San Diego campus)
2010 Massachusetts Avenue, N.W., Suite 500
Washington, D.C. 20036-1023
(202) 466-7496

National Council on Rehabilitation Education
c/o Dr. Garth Eldredge, Administrative Secretary
Utah State University
Department of Special Education and Rehabilitation
2870 University Boulevard
Logan, Utah 84322-2870

National League for Nursing
61 Broadway
New York, N.Y. 10006
(212) 363-5555

National Recreation and Park Association
22377 Belmont Ridge Road
Ashburn, VA 20148
(703) 858-0784

Western Association of Graduate Schools
University of Washington, The Graduate School
Box 351240
Seattle, WA 98195-1240
(206) 543-9054

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 the AACSB – International Association for Management Education, 600 Emerson Road, Suite 300, St. Louis, MO 63141-6762, (314) 872-8481, at both the undergraduate and graduate levels. The M.S. in Financial and Tax Planning and the Certificate in Personal Financial Planning are registered with the International Board of Certified Financial Planners, 1700 Broadway, Suite 2100, Denver, CO 80290-2101, (303) 830-7500.

The College of Engineering undergraduate programs in aerospace, civil, electrical and mechanical engineering are accredited by the Accreditation Board for Engineering and Technology, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202, (410) 347-7700.

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 Accreditation Board for Engineering and Technology, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202, (410) 347-7700.

The Didactic Program in Dietetics and the Preprofessional Practice Program in Dietetics in the Department of Exercise and Nutritional Sciences are approved by the American Dietetic Association, P.O. Box 97215, Chicago, IL 60678-7215, (312) 899-0040.

Degrees and Certificates

San Diego State University offers the following degrees and certificates:

- Bachelor of Arts
- Bachelor of Science
- Bachelor of Music
- Bachelor of Vocational Education
- Master of Arts
- Master of Science
- Master of Business Administration
- Master of City Planning
- 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
- Doctor of Philosophy

Nondegree programs leading to certificates are offered in Accounting, Applied Gerontology, Applied Linguistics and English as a Second Language (ESL), Art (Imperial Valley Campus only), Bilingual (Spanish) Special Education, Business Administration (Imperial Valley Campus only), Children's Literature, Cross-Cultural Language and Academic Development (CLAD), Developing Gifted Potential, Early Childhood Special Education, Early Intervention, Environmental Studies, Español Commercial, Exercise Leadership, Family Life Education, Français Commercial et Économique, Geographic Information Science, Instructional Software Design, Human Services Paraprofessional, Instructional Technology, Introductory Mathematics, Personal Financial Planning, Preventative Medicine Residency, Professional Services Bilingual/Multicultural, Public Administration (Imperial Valley Campus only), Recombinant DNA Technology, Rehabilitation Administration, Rehabilitation Technology, Resource Specialist of Competence, Single Subject Mathematics, Spanish Court Interpreting (Imperial Valley Campus only), Spanish Translation Studies, Supported Employment and Transition Specialist, Teaching the Emotionally Disturbed, Technical and Scientific Writing, United States-Mexico Border Studies, and Workforce Education and Lifelong Learning.

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, 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 nine fields; the College of Engineering offers the Bachelor of Science degree in engineering with majors in four fields; and the College of Education offers curricula in teacher education leading to graduate credentials at all levels of public school teaching.

The Department of Communicative Disorders offers curricula leading to graduate credentials in Education of the Deaf and Deaf-Blind; clinical certification and graduate credentials in speech pathology, audiology and communicative disorders.

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, community health nursing, and nursing systems administration) and offers a curriculum leading to registered nurse licensure and public health nurse credential, and health services credential (school nursing).

(4) *Preprofessional and nondegree curricula:* Programs are offered in allied health, pre dental, pre legal, pre medical, and preveterinary leading to transfer to professional schools. Air Force, Army, and Naval ROTC programs are also available.

Graduate Curricula. The Graduate Division 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 Business Administration, the Master of City Planning, 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, Master of Social Work and Juris Doctor, and the Doctor of Philosophy in biology, chemistry, clinical psychology, ecology, education, engineering sciences/applied mechanics, geography, language and communicative disorders, mathematics and science education, and public health/epidemiology.

Student Services

Division of Student Affairs

The Division of Student Affairs supports the academic mission of the University by providing services which assist students in identifying, clarifying, and achieving their educational and career goals. Through the Division of Student Affairs the campus expresses its awareness that students have unique financial, developmental, social, cultural, psychological and health related needs both in and out of the classroom.

In addition to direct assistance to students, the Division of Student Affairs is charged with developing programs which enhance the learning environment on campus and improve the quality of life for students and others. Central to this charge are activities which promote and sustain an appreciation for the diversity of cultural, racial and life-style backgrounds represented on the campus; the investigation of contemporary issues concerning the well-being and life choices of students; and a campus environment which encourages a productive interchange of ideas.

By working with the following departments students will receive the assistance and counseling they need to remain focused on their studies while maturing as individuals and members of the campus community.

Office of Admissions and Records	Housing and Residential Life
Career Services	International Student Center
Counseling & Psychological Services	Judicial Procedures
Disabled Student Services	Ombudsman
Office of Educational Opportunity/ Ethnic Affairs (EOP)	Scholarship Office
Financial Aid	Student Outreach Services
Health Services	Student Resource Center
	Test Office
	Veterans' Affairs

Campus Tours

Student Services, Room 1602, (619) 594-6868

Tours of the campus are conducted by the SDSU Ambassadors. The Ambassadors have been 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, or for information about scheduling campus tours, please contact the Student Resource Center.

Career Services

Student Services, Room 1200, (619) 594-6851
<http://career.sdsu.edu>

Career counselors assist students in the exploration of their skills, interests and values as they choose a major and develop a career plan. A variety of computerized instruments are used in the career counseling and job search process. An extensive Career Resource Library is available to provide information about potential employers as well as current open positions for graduates.

A centralized listing of paid part-time jobs, volunteer positions, and internships for on and off campus is available through the Student Employment section of Career Services.

Career fairs are scheduled each semester allowing students to meet employers in an informal setting. A comprehensive career fair is scheduled in September followed by a graduate and professional school day. In the spring a series of specialty fairs are scheduled, including one for summer jobs. Access to a bank of SDSU alumni (through our Career Consultant Network) may also help students explore numerous career possibilities.

The On-Campus Interviewing program brings prospective employers and students together for career employment and internship interviews. Students are assisted in preparing for these interviews and all

other aspects of the job quest through workshops and individual career counseling.

Various services are offered to alumni for a nominal fee.

Career Services is open 8:00 a.m.–4:30 p.m., Monday through Friday, and the Career Resource Library is open until 6:00 p.m. on Thursdays during fall and spring semesters while classes are in session.

Counseling & Psychological Services

Student Services, Room 2109, (619) 594-5220

Counseling & Psychological Services (CPS) offers individual and group counseling for the typical college student who wants assistance in coping with, and successfully resolving, the problems they face in everyday life. Issues relating to intimate relationships, self-esteem, personal independence, conflict, anxieties, self-confidence and academic performance are difficult and common obstacles for most college students. Peer counselors are also available to assist students with personal and family problems.

Individual counseling services are designed for students who can benefit from short term, intensive counseling, lasting a maximum of six sessions. If a student's situation requires longer term therapy, referrals can be made to off-campus resources.

CPS has a stress management program and Personal Growth Resource Library equipped with over 200 video and audio tapes and a variety of free brochures on topics to assist students in their academic performance and personal growth.

Enrolled SDSU students who want help from the CPS staff in locating off-campus community services can call (619) 594-5220.

Counseling psychologists at CPS offer help in:

- Learning to reduce stress. Stress can interfere with concentration, memory, and mental processing.
- Dealing with relationship loss, feelings of helplessness or hopelessness, which may lead to a lack of motivation or prolonged depression.
- Developing communication skills and problem solving techniques to improve important relationships.
- Building self-esteem and improving coping skills.
- Clarifying values and career decisions.

Counseling & Psychological Services is open from 9:00 a.m.–4:00 p.m., Monday through Friday.

Disabled Student Services (DSS)

Student Services, Room 1661, (619) 594-6473;
TDD: 594-2929

Disabled Student Services provides support services for students with mobility limitations, learning disabilities, hearing or visual impairments, psychological disabilities, and other disabilities. Counselors are available to help students plan an SDSU experience to meet their individual needs. They assist students in making personal, academic, and vocational choices, and show how best to utilize campus facilities. Prior to receiving assistance, appropriate medical documentation must be submitted to Disabled Student Services.

Services available to all DSS students include a writing center/assistive computer technology lab (the High Tech Center) where students may use standard or assistive computer technology for assignments and may receive tutoring assistance with their writing. Other services available when appropriate include priority registration for students with special needs; close-in parking; transportation on campus and information about off-campus transportation; government benefits counseling; accessibility information, maps, and library study rooms; reader services and assistance with books on tape; sign language interpreters for deaf students; testing assistance for visually impaired, learning disabled, and dexterity-limited students; loan of

educational support equipment (tape recorders, amplification equipment, wheelchairs, etc.); tutoring and notetaking services, referral to off-campus agencies for mobility orientation, financial benefits; and other services.

In addition to these services, DSS offers a series of classes aimed at helping students achieve academic success and fulfill university requirements. Rhetoric and Writing Studies 92A and 92B are designed to help students develop their writing skills and meet the lower division writing requirement. General Mathematics Studies 90A and 90B are review classes designed to help students meet university mathematics competency requirements. Rhetoric and Writing Studies 98A is designed to teach students effective test preparation, notetaking, and other strategies to help them improve their academic performance.

Educational Opportunity/Ethnic Affairs (EOP)

Student Services, Room 2209, (619) 594-6298

The Office of Educational Opportunity/Ethnic Affairs (EOP) at SDSU has helped many students with the potential for academic success and who are from low-income backgrounds enroll in and graduate from college. It is the purpose of the program to support those 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, educational, or cultural factors.

Student services provided by EOP include preadmission counseling, summer program, priority registration, academic advising, personal counseling, referral services, individual tutoring, study groups, academic skills courses, work study, and multicultural activities. Financial aid is available through the Financial Aid office.

To apply for the program, students must complete the CSU Application for Admission and **check the appropriate box for EOP**. Supplemental application forms will then be sent to students indicating interest. For assistance in filling out the application forms, or for further information about the program, please contact one of the EOP recruiters in the Student Outreach Services office, (619) 594-6966.

Health Services

Corner, Campanile Drive and Hardy Avenue, (619) 594-5281
<http://shs.sdsu.edu>

All regularly enrolled SDSU students have prepaid a health fee as part of their tuition and fees which entitles them to basic medical services. Some services, including annual Pap smears and pharmacy, require a minimal fee. Charges associated with these services are usually dramatically lower than those found elsewhere. This care is provided at Student Health Services, an on-campus center where health care providers offer a wide range of programs and services. Services include:

Medical care by physicians board certified in family practice, internal medicine, orthopedics, psychiatry, dermatology, and preventive medicine, and by primary care nurse practitioners; nursing, x-ray, and laboratory services; a pharmacy which dispenses prescriptions and over-the-counter items at cost; health-related counseling and campuswide health education programming offered by the Health Promotion Department.

REQUIRED: Proof of Measles and Rubella Immunizations or Immunity

New or readmitted students born on or after January 1, 1957 must present proof of immunity to measles and rubella (German Measles) during their first semester at SDSU. Students who have not complied with this California State University mandate prior to the registration deadline will **not** be able to register for their second semester.

Measles and rubella immunization is now required because both of these diseases continue to cause disability and sometimes death in college-age individuals. Epidemics have occurred on many college campuses during the past few years because a sizeable percentage of students lack immunity to measles and rubella. 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 encour-**

aged to consider a second immunization for measles prior to enrollment.

Students may fulfill the immunization requirement by bringing or sending documentation as proof of either previous illness or immunization to **Student Health Services**. Students may also receive a free immunization at Student Health Services. For more information, call (619) 594-6684.

Strongly Recommended Health Screening

Immunization from the following diseases may also protect students against potentially severe infections: tetanus, diphtheria, polio, mumps, and hepatitis B. Like measles, these too can be particularly harmful in the college-age group. The chicken pox vaccine is available for students who have not had the disease. These immunizations are available at reduced cost at Student Health Services. Flu shots are available annually, as well.

Entering students are also strongly encouraged to have a screening test for tuberculosis (TB). The TB skin test is offered free at Student Health Services.

Appointments

Students without acute or urgent problems are encouraged to make an appointment. Those with problems requiring immediate medical attention should walk in. Student Health Services is open twelve months of the year. During the fall and spring semesters, the clinic is open from 8:00 a.m. to 4:30 p.m., Monday through Friday (call for extended hours of operation). During the summer, clinic hours vary. It is best to call for hours of service and to ask about the availability of services (619) 594-5281. 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.

Student Health Advisory Board

Students can participate in the clinic activities and offer important feedback about services through membership on the Student Health Advisory Board (SHAB) sponsored by Associated Students. Members not only work with clinic staff on a variety of health education projects, but also act as liaison between the SDSU student body and Student Health Services. SHAB keeps 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 or urgent medical care is also provided to faculty, staff, and campus guests for accidents and injuries occurring on campus. Accidents requiring treatment and/or transportation to Student Health Services or a local hospital should be reported immediately to the SDSU University Police; telephone (619) 594-1991.

SDSU students are treated by the University as adults. Accordingly, 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. **The University does not provide accident, liability, or health insurance coverage for students. This includes those participating in extracurricular activities, intramural sports and required or elective academic programs such as laboratory courses, workshops, theatrical productions, internships or practica.** 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.

Through the Associated Students, a supplemental **health insurance policy** is available and recommended to students having no private medical or accident insurance coverage. The insurance includes hospitalization benefits and specified medical and surgical services. The policy may be purchased per semester or yearly basis. An open enrollment period is available the first thirty days of each semester, and the policy may be purchased at the Aztec Center Ticket Office.

Housing and Residential Life

6050 Montezuma Road, (619) 594-5742

The Housing and Residential Life Office (HRLO) at SDSU is committed to fulfilling San Diego State'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 Education, students who live in residence halls have a better chance of succeeding in college; therefore, the University encourages students to live at SDSU at least two years while studying at SDSU. The HRLO is located at 6050 Montezuma Road, (619) 594-5742, and offers a variety of living environments convenient to campus facilities, to suit the varying needs of a diverse and dynamic student population. An active and nationally-recognized residence hall student government provides residents a chance to gain leadership experience and become involved with their on-campus community.

Residence Halls

Residence halls offer a number of accommodations and special interest living areas. Currently, special interest living areas include Extended Quiet Study, Upper Division, Substance-Free, freshman Living/Learning Center, and Aztec Engineering Residence. These areas may vary from year to year depending upon student interest. Six co-educational residence halls/complexes house about 2,900 students. Each hall includes sleeping accommodations, lounge areas, study rooms, a recreation room, and laundry facilities.

On the east side of campus are Zura Hall, a nine-story high-rise; eight-story Tenochca; and the freshman Living/Learning Center complex of two, three-story, red-brick halls (Maya and Olmeca). On the west side are 11-story Chapultepec Hall and the Templo del Sol complex (Tarastec, Toltec, and Zapotec) of three-story red-brick halls. Each red-brick hall accommodates approximately 200 students. High-rises house from 350 to 580 students each.

Each hall offers double occupancy accommodations for students, with a very limited number of single rooms available for returning students in some halls. Meal plans are included with contracts at any of these halls and students may choose from several meal plans. Apartment-style living is also available for returning students at the Villa Alvarado apartment complex. The 90-unit complex accommodates 354 students in furnished two-bedroom units (four residents per apartment).

For the 1998-99 year, the cost for room and board was \$5,344 (10-meal plan, double occupancy). Fees for Villa Alvarado, which do not include board, were \$3,940 for the academic year. Rates for all halls are reviewed and adjusted annually to meet cost-of-living increases.

APPLICATIONS FOR ON-CAMPUS HOUSING ARE AVAILABLE STARTING NOVEMBER FOR THE UPCOMING ACADEMIC YEAR AND STARTING SEPTEMBER FOR THE FOLLOWING SPRING SEMESTER. APPLICANTS **SHOULD NOT WAIT FOR ACCEPTANCE TO SDSU BEFORE APPLYING FOR ON-CAMPUS HOUSING**. To request an application for housing, students should telephone or write to the Housing and Residential Life Office at the University before they are admitted to SDSU, or thereafter.

Confirmation of a room reservation is made after the following requirements have been met: (a) the student has been admitted to the University; (b) the signed contract has been returned to the Housing and Residential Life Office; and (c) the first payment has been received as specified. Though consideration will be given to a student's request for an individual hall and roommate, a specific assignment cannot be guaranteed.

During the Summer Sessions, rooms are available on a receipt-of-check date priority. Full payment must accompany the application. Students should contact the Housing and Residential Life Office in mid-April for information concerning Summer Session housing.

Piedra del Sol Apartments

As part of the Foundation Redevelopment Plan, the new Piedra del Sol Apartments are anticipated to be available for occupancy in Fall 1999. Designed for returning SDSU students who want a truly independent lifestyle, this complex offers two, three, and four bedrooms in a 60-unit complex. Apartments are unfurnished. Information and applications are expected to be available Spring 1999 through the Housing and Residential Life office.

Off-Campus Housing

Since family housing is not available on campus, off-campus housing serves the needs of families and others. The Housing and Residential Life Office maintains an Off-Campus Housing World Wide Web site with current listings of off-campus rental units. In addition, listings of available dwellings and also of students seeking roommates are posted next to the Housing and Residential Life Office. Off-campus housing accommodations in the San Diego area include apartments, condominiums, houses, rooms in private homes, etc. To view listings posted on the web, visit the Housing main page at <http://www.sa.sdsu.edu/hrlo/>.

Residential Greek Letter Organizations

Fraternities and sororities offer students opportunities for friendship, small group living, social and recreational activities, involvement in community service projects, and development of leadership skills. At SDSU there are 14 residential fraternities and 9 residential sororities from which to choose. Chapter houses provide accommodations for about 25-50 percent of their members. New members should generally not plan on living in chapter houses until at least their second year.

International Student Center

International Student Center, (619) 594-1982
<http://www.sa.sdsu.edu/isc>

More than 700 international students from 75 countries attend SDSU. Through the support provided by the International Student Center, these students can find assistance in reaching their educational goals. Services include prearrival advising, orientation to campus life, academic and immigration advising, and a housing referral service. Support is also provided for prospective international students interested in applying to SDSU.

The International Student Center also coordinates a variety of activities designed to foster intercultural goodwill, understanding, and friendship. One such activity is provided by the Intercultural Ambassadors, through which selected international students make home-country presentations in San Diego schools. The ISC also provides opportunities for international students to get involved in the San Diego community through the InterNational Partners Program which links students and local community organizations in mutually beneficial relationships. In addition, the ISC invites faculty, staff, and the community to become American Friends to international students new to the SDSU community and to participate in the many events listed in the ISC Calendar of Intercultural Activities. These include the International Coffee Hour, the International Festival, the Intercultural Exchange Camps, and the International Film Festival.

Ombudsmen

Student Services, Room 3635, (619) 594-6578

Becoming a student at SDSU also means becoming a member of a special community which 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 Ombudsmen are independent and impartial agents who help individuals and groups seeking the resolution and correction of complaints. The Ombudsmen act as liaisons 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 which may best resolve the problem.

Examples of student complaints which 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 Ombudsmen may act as mediators 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 sessions) after the semester during which the student was allegedly aggrieved.

Student Outreach Services

Student Services, Room 2307, (619) 594-6966

FAX: (619) 594-1511 EMAIL: sdsusos@sdsu.edu

http://www.sdsu.edu/sos/sos_home.html

Student Outreach Services (SOS) is SDSU's official representative in the community beyond the University, linking SDSU with schools, colleges, and communities. Through the programs which make up SOS—school and college relations, the recruitment component of EOP, and special programs—important facts about University life are provided to prospective students. For guidance in college selection and preparation, or information about admission requirements, academic programs, or other student services, SOS is the campus resource.

Specific services provided by SOS include:

Visits to high schools and community colleges and meetings with counselors, students, and parent—Assistance to SDSU colleges, schools, and departments in providing information about their programs to prospective students—Distribution of printed information about the University to students, teachers, counselors, and other members of the community—Support for academic partnerships between the University and junior high/middle schools, secondary schools, and community colleges—Administration of special programs including the SDSU Open House, pre-collegiate tutorial program, freshman-for-a-day program, counselor conferences, and others.

Student Outreach Services invites all prospective students and interested members of the community to take advantage of the services and programs offered. To find out how, please contact SOS.

Student Resource Center

Student Services, Room 1602, (619) 594-5221

The Student Resource Center values the ability to respond to the needs of students and their families. At the SRC, questions will be answered or referrals made. Beginning with the SRC's New Student Orientation Programs, the SRC supports students throughout their years at SDSU in achieving academic goals and in enhancing the University experience. Students may visit the SRC for the following:

(1) *Programs and services*

Academic Orientation – assistance with course selection, General Education and competency requirements, and registration (for freshmen and transfer students).

Student Life Orientation – introductions to University programs, services, traditions and history; opportunities for involvement on campus (for freshmen and transfer students).

Living/Learning Center – a special housing option for freshmen only. Creates a small academic college atmosphere at a large university. The LLC includes University Seminar and Integrated Curriculum (see Special Programs and Services in this section of the catalog for a complete description).

Annual Leadership Institute – workshops and seminars presented to students and advisers from universities throughout the western United States.

Emerging Leader Program – leadership skills and campus involvement opportunities for freshmen.

Leadership and Personal Growth Workshops – sessions on a wide variety of topics are presented by SRC staff as requested by student groups.

Leadership Class – “Leadership in Educational Settings,” a three-unit, upper-division class, offered through the College of Education (Counseling and School Psychology 310) each spring semester.

Leadership Council – plans and promotes the Leadership Institute; social and community service activities.

Project Progress – student diversity awareness program.

Quest for the Best Vice Presidential Awards – this student service award is presented annually to outstanding students and the faculty they nominate.

Ambassadors – SDSU's official student representatives and tour guides.

Campus tours.

Student internships for class credit.

(2) *Information services*

General campus and academic information.

Publications for parents, students, visitors, sponsors, etc. News for Aztec Parents, a newspaper for members of the Aztec Parents Association, is published by the SRC. Call (619) 594-5221 for information about APA membership.

Response to mail inquiry.

(3) *Student activities*

On-campus status for clubs and organizations.

Implementation of University policies and procedures with regard to student activities.

Approval of all on-campus club activities, including fundraising events.

(4) *Parent/family and community programs and development*

Aztec Parents Association – membership, programming, services and events, regional meetings.

Fundraising and development to directly support student programs.

Parents Orientation Program.

Interaction with administrators.

Liaison officer in support of parent involvement with the University.

(5) *Student services' research and evaluation*

Surveys of student needs, attitudes, and behaviors.

Evaluation of SRC and other Student Affairs programs and services.

Test Office

Student Services, Room 2549, (619) 594-5216

FAX: (619) 594-5036

<http://www.sa.sdsu.edu/testofc/testpage.html>

The Test Office is an important resource for the entire University community, serving both students and faculty by administering paper and pencil and computer based tests for the purpose of admission, class placement, competency for graduation, licenses, credentials, and career planning. A library of standardized assessment instruments is maintained for use by faculty and students in testing classes, and test scoring and analysis services are provided for classroom tests.

Test dates for San Diego State University competency and placement tests are listed in the Test Information section of the current Class Schedule. Advance reservations as well as fee payments are required for most tests. The Test Office will provide students with test dates and registration procedures for major national examinations in the form of a bulletin of information or with the address of the testing service. Reservation for computer based tests can be made at the Test Office (619-594-0968). Students who are interested in assessments, assisting with the counseling process, or career planning must contact Counseling & Psychological Services or Career Services. Special competency and national testing arrangements for disabled students are made through Disabled Student Services.

Although competency test requirements are monitored by various offices on campus, the Test Office will attempt to assist students in signing up for the required examinations or refer them to the proper agency.

Veterans' Affairs

Student Services, Room 1510, (619) 594-5813

Students who are eligible for veterans, dependents, or reservists V.A. education benefits should visit SDSU's Veterans Affairs Office (VAO). Services available through the VAO include assistance in applying for education benefits, coordinating the V.A. work/study program, and processing tutorial assistance paperwork.

Students planning to attend SDSU should contact the Veterans' Affairs Office two months before the beginning of their first semester; they may be eligible for an advance payment of the first V.A. education check. For additional information, about the VAO or the services provided, please telephone or visit the office.

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 educational costs. Most students qualify for some type of assistance. For scholarships recognizing academic excellence, refer to the following information on Scholarships. Only United States citizens and permanent residents are eligible to apply for financial aid.

Information about all state, federal, and institutional aid programs is available from the Financial Aid Office, Student Services, Room 3605, (619) 594-6323. A financial aid brochure which describes the programs available, the eligibility requirements, rights and responsibilities of receiving aid, and satisfactory academic progress to establish and maintain eligibility for financial aid is available from the Financial Aid Office. Information is also available on the World Wide Web: <http://www.sdsu.edu>.

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

Applications are reviewed and awarded throughout the year based on available funding. January through May, however, is considered the optimum time period to apply for aid to receive funding at the beginning of the fall semester.

Cost of Living

To ensure equity, San Diego State University establishes standard student budgets in coordination with The California State University system. Student budgets, updated annually to account for inflation are currently:

Costs of Attendance for the 1999-2000 Academic Year

	Living off Campus	Living on Campus	Commuting from Home
Registration fee for materials, service, student activity, student union, facilities	\$ 1854	\$1854	\$1854
Books and supplies	810	810	810
Room and board.....	7122	6838	2363
Transportation	793	619	639
Personal	1901	1823	1960
Total	\$12,480	\$11,944	\$7626

The registration fee for a postbaccalaureate student is \$1932 for the academic year. In addition to the registration fee, nonresident (foreign and out-of-state) students pay tuition (see Schedule of Fees section). **All fees and costs are subject to change without notice.**

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 costs is available from the University Cashiers Office, Student Services, Room 2620, (619) 594-5253.

Information concerning San Diego State University policies regarding any refund due to the federal Title IV student assistance programs as required by the regulations is available from the Financial Aid Office, Student Services, Room 3605, (619) 594-6323.

Scholarships

Scholarships reward academic excellence and are not generally based on financial need. For financial aid not based on academic record, refer to the preceding information on Financial Aid. All students, regardless of nationality, citizenship, or residency status, are eligible, with appropriate grade point average, to apply for scholarships.

Scholarships and Fellowships Administered by Departments

Students receive scholarships, fellowships, grants, or stipends through the various departments. Federal, state, and private industry support 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 some particular area of study should check with an adviser in the department of their major to determine what scholarship, fellowship, grant, or stipend support might be available to them.

Fellowships for Graduate School

As a general rule, students planning graduate work should inquire about graduate fellowship support from the graduate school to which they are applying. The San Diego State University Scholarship Office receives the annual announcements on most national awards including Fulbright, Ford, Rotary, Rhodes, and Marshall scholarships. Students interested in fellowships of this type are encouraged to discuss their applications with members of the San Diego State University faculty who have themselves in the past received these fellowships. Scores from the Graduate Record Examination, Law School Admission Test, Admission Test for Graduate Schools of Business, Dental Admissions Test, or Medical Colleges Admission Test, as appropriate, are required in applying for most fellowships; therefore students should take the appropriate test early in the fall of their senior year. Information concerning these tests may be obtained from the San Diego State University Test Office, Student Services, Room 2549, (619) 594-5216.

San Diego State University Scholarships Scholarship Philosophy and Eligibility Requirements

A scholarship is a monetary award given to outstanding students to recognize them for their academic excellence, leadership, achievements and promise.

They are provided by private donors, corporations, professional associations and alumni.

High school seniors and undergraduate or graduate students may apply for scholarships awarded by their major department and/or the San Diego State University Scholarship Committee.

Students apply on their own initiative for the University Scholarship Program. Some scholarships listed require special applications and/or have a specific selection process.

Competition is based on outstanding academic achievement, campus and extracurricular activities, employment, and an essay. Undergraduates must have a 3.50 overall GPA or a 3.70 in the last 30 units of university work. Graduate and postbaccalaureate students must have a 3.50 overall GPA for work completed after the bachelor's degree or, in the absence of completed postbaccalaureate units, a 3.50 overall undergraduate GPA or a 3.70 in the last 30 units of university work. High school seniors must have a 3.50 cumulative GPA (excluding physical education and military science) for all work completed in the first seven semesters.

Applications for the SDSU scholarship program are available in the Scholarship Office, from all department secretaries, and in San Diego County high school and community college counseling offices. You may also write or call the SDSU Scholarship Office, 5500 Campanile Drive, San Diego, CA 92182-7438; telephone (619) 594-6180; Email: cfox@mail.sdsu.edu or FAX: (619) 594-7303.

Applications are available each year during one application period, November through early February. The SDSU scholarship application must be filed or postmarked not later than the established early February deadline. Students need to submit only one application for the SDSU scholarship program. Individual results will be mailed to all applicants during June for the following academic year.

The dollar amount per scholarship is subject to change based on registration costs and investments by the SDSU Foundation. There is no limit to the number of scholarships for which a student may be considered. Note: Freshman Scholar Awards are only available to entering freshman who meet the University, merit-based eligibility requirements. Several \$8,000 awards (\$1,000 per semester) are designed to partially cover the cost of registration fees for four years of undergraduate studies providing the recipient maintains a minimum 3.5 grade point average.

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 standards for these scholarships are closely related to those established for the SDSU scholarship program, but application forms and deadlines are separate from the program. Students may seek advisement regarding application at the SDSU Scholarship Office in late spring or September.

COLLEGE OF ARTS AND LETTERS

Africana Studies Department

African American Faculty/Staff
Napoleon A. Jones, Jr.
Kimbrough Memorial
Dewey and Jessie E. Mosby
Danny L. Scarborough Memorial
Shirley Wade Thomas

Anthropology Department

Norton Allen Memorial

Chicana and Chicano Studies Department

Letty Zanchez Memorial

Classics and Humanities Department

Martha Biehl Memorial
Robert and Paula Cottam Memorial in Classics
Friends of Classics Charter
Viola Granstaff Memorial

Economics Department

CPE, Alumni
CPE, Chadwick
CPE, Freeman
CPE, Weiss
Economics Intern Program
Yiannis Venieris
Henry Wood

English and Comparative Literature Department

Creative Writing
Honorable Scholar Scholarship Fund
Ruth G. Keen Memorial
Mindy Gates O'Mary Memorial
Kenneth and Dorothy Stott Memorial

Geography Department

Cartography Scholarship
William and Vivian Finch
Ted H. Greenwood Award
Physical Geography
Lauren C. Post Memorial

History Department

Andrew Appleby Undergraduate Memorial
Andrew Appleby Graduate Memorial
Katherine Ragen Memorial
Lionel Ridout Memorial
Richard Ruetten Memorial
Kenneth and Dorothy Stott Memorial

Jon Sutherland Memorial
Lewis M. Terrell

Japanese Language Program

Japan Travel
Kyocera
Tohmatsu Awoki/Touche Ross

Political Science Department

Ned V. Joy Memorial
Matthew O'Gara
Lewis M. Terrell

Religious Studies Department

James E. Sparks Memorial

Sociology Department

Maxine Johnson Memorial
Sociology Department Fund
Sociology Graduate

Spanish Department

Clifford H. Baker Memorial
Raymond D. Weeter

Women's Studies Department

Betty Nesvold
Andrea O'Donnell Memorial
Women's Studies Graduate Fellowship

COLLEGE OF BUSINESS ADMINISTRATION

School of Accountancy

Accounting Associates
American Society of Women Accountants
Arthur Andersen LLP
Association of Government Accountants
California Government Finance Officers Association
California Society of Certified Public Accountants
Considine and Considine
Deloitte and Touche LLP
Robert Edmond Duke
Elias J. Katzen Memorial
Ernst and Young LLP
Healthcare Financial Management Association
KPMG Peat Marwick LLP
Bernard Nydam Memorial
Rowling Dold and Associates
Toole Family
Solar Turbines, Inc.
Price Waterhouse

Financial Services

John Burnham & Company
Robert F. and Fredricka B. Driver/Robert F. Driver Company
Ed Fletcher Foundation
Irving Katz Memorial
Professional Insurance Agents
San Diego Mortgage Bankers

Information and Decision Systems Department

APICS
Georgia Amsden Memorial
Andersen Consulting Outstanding Jr. IDS Student
Alvin Morrison Memorial
Nuclear Information and Records Management Association, Inc.

International Business

Alvord Branan Memorial

Management Department

David W. Belcher Memorial
Frances Torbert Memorial

Marketing Department

Connie Fotinos Memorial
Ellen Sue Gerber Memorial
Marion R. Hoechst
O.A.S.I.S.
W.A.F.C.

Real Estate

John Burnham & Company
Robert C. Hird Memorial
San Diego Mortgage Bankers

College of Business Administration Miscellaneous Scholarships

Building Industry Association
Business Department Minority
College of Business General
Robert Hess Memorial
Kaufman Foundation
The J. M. Long Foundation
Southeast Asian Alliance
Bill Thurman, North Island Federal Credit Union
Union Bank of California
Christina Lynn Velasco Memorial
Monica Williams Memorial

COLLEGE OF EDUCATION

Andersen Consulting Outstanding Student
Gertrude S. Bell
Aileen James Birch
Buster Memorial
Patricia Calhoun Memorial
California Retired Teachers Assoc.
Ben Ziri Caravan
College of Education
Clara de Escudero Memorial
Delta Kappa Gamma, Nu Chapter
Alfred Einstein Living Trust/Vera Einstein Memorial
Donald Harder Memorial
Houck Memorial
Judy and Donald James Memorial
Russ and Judy James
Antonia Johnson Memorial
LaPray/Schmock
Raymond Letsinger Memorial
Catherine Y. Lodge Memorial
Richard Servey Memorial
Dr. Robert D. Smith, Jr.
John Paul Stone Memorial
Leslee Teincuff Memorial
Upward Bound Alumni/Robert E. McCabe
Gail White Memorial

COLLEGE OF ENGINEERING

Aerospace Engineering

Salt and Light

Civil and Environmental Engineering Department

American Concrete Company
Association of State Dam Safety Officials
Chi Epsilon Honor Society
Civil and Environmental Engineering Department
Consulting Engineers/Land Surveyors
E. F. Cook Associates
Kimley-Horn Associates, Inc.
J. G. Landoni
George McBain
Nasland Engineering
Byrl Phelps/San Diego Engineers Club
Pountney and Associates, Inc.
Rick Engineering
San Diego County Rock Producers

Structural Engineers
Josephson Werdowitz and Associates
West Consultants, Inc.
Stuart Wong
Woodward-Clyde Consultants

Electrical and Computer Engineering Department

Electrical Engineering Department
Electrical Manufacturing and Coil Winding Associates

Mechanical Engineering Department

ASHRAE
D. Preston Lowrey III Memorial
McAdams Family

College of Engineering Miscellaneous Scholarships

Achievement Rewards for College Scientists (ARCS)
Ball Corporation
Engineering Faculty
David G. Fleet
S.L. Frankel
Eric Gaipa Memorial
General Dynamics
Hughes (NAMS)
Lockheed Leadership
Louise McNally
Money/Arenz Foundation, Inc.
S. Falck Nielsen Family
Cheng-Mo Sun Memorial
Donald Grey Wilson

COLLEGE OF HEALTH AND HUMAN SERVICES

Communicative Disorders Department

Dorothy Baronofsky Memorial
Communicative Disorders Department
Sam Foshee Memorial
Gamma Upsilon, Sigma Alpha Sorority
Nella Feldman Gross Memorial
Barry W. Jones Memorial
Kenneth R. Mangan
Paul Pfaff Memorial
Kala Singh Memorial

Community Health Education

Lori D. Lemas Memorial

School of Nursing

Dawn M. Benson
Lorraine Sears Bryant Memorial
Emeritus Nursing Faculty
Katherine R. Foley Memorial
Dorothea Lambert Memorial
Rueben Marks Memorial
Lottie E. Olberg Memorial
Petra Steinhauer Memorial
Frances Shimp Tidwell Memorial

Graduate School of Public Health

Monge/Weill
Department of Public Health

School of Social Work

Mabel Naylor Danalis Memorial
Jaime Brenner Geller Memorial
Mark Todd Sandways Memorial
Maria Sardinias
School of Social Work Fund
Sharp Health Care
Leon Williams
Ernest Witte Memorial

College of Health and Human Services

Miscellaneous Scholarships

John and Jeanette Hebbel

**COLLEGE OF PROFESSIONAL STUDIES
AND FINE ARTS**

Aerospace Studies

Lorin M. Kemp Memorial

School of Art, Design and Art History

Art Department Fund
Patricia Clapp Memorial
Margaret Dowd Memorial
Frances Ellsworth Memorial
Darryl Groover Memorial
Isabel Kraft Memorial
Paul Lingren Memorial
John J. Rogers
Virginia Thorsen Memorial
Ellamarie Woolley Art Students Assistance Fund

Child and Family Development Department

Mary Quam Hawkins Memorial
Barbara Rosenblatt Memorial
Georgia Tait Stooke Memorial

School of Communication

James Copley Foundation
Al Couppee Memorial
Forensics Scholarship
Golf Writers of America
Steve Harwood Memorial
Harold Keen Memorial
Jack Mills Memorial
Jane Nelson Memorial
Gracia Ogden Memorial
Christopher Packala Memorial
Val Ryser Memorial
School of Communication
Percie Belle Senn Memorial
Kevin Simmons Memorial
Reggie Smith Memorial
Arthur C. and Mildred Wimer

Exercise and Nutritional Sciences Department

Adult Fitness Program
Mary Cave
William Ellis Memorial
Mary Quam Hawkins Memorial
Darlene Haworth
Reet Howell Memorial
Frederick W. Kasch
Margaret "Robin" Murphy Memorial
Miriam Paine Memorial
Physical Education Fund
Barbara Rosenblatt Memorial
William Schutte Memorial
Smith and Nephew Donjoy

School of Music and Dance

Nadine Bolles Memorial
Jean Taylor Brown Memorial
Dante M. Corsi Memorial
Marguerite Ellicott Memorial
Joseph J. Fisch Family
Elsie Hiland Fox Memorial
Johanna Fox Memorial
M.H. Golden
Charles A. Hoyt Memorial
Joseph E. Johnson
Kiwanis Foundation
Lieber-Flower
Jan Lowenbach, Musicology
Alvin Morrison Memorial
Music Department Fund
Bessie S. Purdy Memorial
William Resnick

Lucia Robertson Memorial
Edith Savage Memorial
SDSU Opera Theatre
Sigma Alpha Iota
SPEBQSA
Christine Springston Memorial
Paul C. Stauffer Memorial
University Band
George Willis
Marvin Yerkey Memorial

School of Public Administration and Urban Studies

Cotton/Blend/Associates, Inc.
John Fowler

Recreation, Parks and Tourism Department

Bonnie Jean Gore Memorial
Recreation Faculty

Theatre Department

Joseph J. Bellinghiere Memorial
Jeweldean Brodie Memorial
Greg C. Crowder
Drama Department Patron's
Darlene Haworth
William B. Hektner
Sybil E. Jones Memorial
Gordon Lusk Memorial
Mack Owen Memorial
Marion Ross
Stefanie Ross
Hunton Sellman Memorial
Henry Stanton Memorial

College of Professional Studies and Fine Arts

Miscellaneous Scholarship

Laurin Jones Memorial

COLLEGE OF SCIENCES

Astronomy Department

Awona Harrington Memorial
William F. Lucas Memorial
Clifford and Ruth Kinnell Smith Memorial

Biology Department

Jordan Covin Memorial
Crouch Scholarship for Avian Behavior
Harold and June Grant Memorial
Hardman Foundation
Mabel Myers Memorial
Rancho Santa Fe Garden Club
Systematics and Evolutionary Biology

Chemistry Department

Ronald Dietz
Edgar E. and Catherine L. Hardy
Neil Harrington Memorial

Geological Sciences Department

AMOCO Foundation
Baylor Brooks
Chevron/Geology
Rollin and Carolyn Eckis
Geology Fund
Awona Harrington Memorial

Mathematical and Computer Sciences Department

BMC Software, Inc.
Ronald Dietz
Money/Arenz Foundation, Inc.
Alba G. Thompson Memorial

Physics Department

Edmond A. Duke
Optics-Physics
Skolil Fund

Financial Aid and Scholarships

Psychology Department

Dorothe Frick Memorial
Dr. Edward Geldreich Memorial
Social Psychology
Doris Townsend Memorial

College of Sciences Miscellaneous Scholarships

Achievement Rewards for College Scientists (ARCS)
Frank Alverson Memorial
BMC Software, Inc.
David G. Fleet Memorial
Harry E. Hamber Memorial
Robert Harwood Memorial
Hearst Foundation
Phillip and Mary Kantor Memorial
Louise McNally
Paul G. Peninger Memorial
San Diego Audubon Society
William Trowbridge Memorial

ATHLETICS

Mike Anaya Memorial
Murray Callan Memorial
Don Coryell
Harold and June Grant Memorial
Patricia and Harry Hodgetts
Kelley Athletic
Jessie Klicka Foundation
Bill Ruzich Memorial
Frank Scott Memorial
Smith & Nephew Donjoy
Orien W. Todd, Jr. Memorial
Eric Wynalda

General Scholarships

In addition to the University Scholarship Committee Awards and the College, Department and School Scholarships, there are a number of general scholarships available. Recipients for some of these scholarships are chosen by the University Scholarship Committee; recipients for others are chosen by the donors on the basis of nominees sent to them by the University Scholarship Committee.

Alumni Association
Anonymous – C
Anonymous – T
Associated Students
Aztec Parents Association
Aztec Shops
Baldwin Family
Donald Basile Memorial
Mary Earnest Bean Memorial
Brian Billotte Memorial
Thomas C. Bishop Memorial
Maryl Brooksher Memorial
William Calkins Memorial
Enrique Camarena Memorial
Campbell/Cartier Memorial
Cap and Gown Chapter of Mortar Board
Cesar Chávez Memorial Book Scholarship
Chula Vista Masonic Lodge 626
Thomas Cortez
Cotton/Metzger
Dean's Endowment
Tony Esse Memorial
Eric Etebari
Extended Studies General
Farmers Insurance
Martha Farnum Memorial
Clyde and Myrtle Fields Family Memorial
Forensic Mental Health
Fox Foundation
Johanna M. Fox Memorial
Future Scholars
General Dynamics Land Systems
General Fund
General Hispanic

Good Sport Howie
Arthur C. Harris Memorial
Rear Admiral Virgil L. Hill
Kathleen Horn Memorial
IFC Greek
Imperial Valley Campus
John Jester Memorial
Richard Kamenash Memorial
Carolyn Kelley Memorial
Wilbur S. Kelley Memorial
Kiwanis Foundation
Conrad Klement Memorial
William and Edna LaSalle Memorial
Lipinsky Family
George Macphee Memorial
May S. Marcy Memorial
Maxey Family
Jennifer and Robert E. McCabe Memorial
Sally McMahan/Doves Endowment
Niaz Mohamed Family
Arthur Tennes Moe Memorial
Money/Arenz Foundation, Inc.
Magdalena Mora Memorial
Mortar Board Alumni of San Diego
Ralph Moses Memorial
National City Middle School
Naval Science/ROTC
Mohamed Niaz Family
James O'Hara II Memorial
Palz/Nicholson
Patino Family Scholarship
Deb Pedersdotter
Emma Pellettiri Memorial
Jerry Pennington

Phi Alpha Alpha Sorority
Phi Beta Delta
Phi Beta Kappa
Carolyn Pittman Memorial
Foster S. Post Memorial
President's Scholarship
John F. Reeves Memorial
Residence Hall Association
Rotary International District #5340
Bill Ruzich Memorial
San Diego Insurance Adjusters
San Diego State University Memorial
San Diego State University Retirement Association
San Diego State University Women's Association
Brian Schultz Memorial
Etta Schweider Memorial
Robert Patterson Shields Memorial
Arthur and Norma Spencer Memorial
Dean Spencer Memorial
David Springer Memorial
Gary R. Stephany
Frank G. Tait Memorial
Terry Lynn Thompson Memorial
Transportation Club of San Diego
Wilmia Tyler Trott Memorial
Undergraduate Deans
Wal-Mart Foundation
Dorothy Wells Memorial
D.B. Williams Memorial
Peggy Wolter Memorial
John Yarborough Memorial
Mr. and Mrs. John Zweck Memorial

Special Programs and Services

Academic Computing

The SDSU computing environment provides access to scores of software products including World Wide Web browsers, programming languages, word-processing, spreadsheets, presentation packages, relational databases, statistical software, and large databases such as Compustat. The University provides access to a Sun SPARC Server (running SOLARIS) and a CRAY C98/8128 Supercomputer. Both the Sun SPARC Server and the CRAY C98/8128 computers are available to the university community via the campus Internet which also links students to specialty computing centers located at other California State Universities.

The University has over 1,500 microcomputers as well as a significant number of X-Terminals located in 53 departmental/college computer laboratories. There are also three large computer labs open to all students; all machines in those labs are connected to the Internet. The open computer labs are (1) the Love Library Student Computer Lab located in Love Library 224 which has PCs, Macintoshes, X-Terminals, and laser printing; (2) the Social Science Research Lab located in PSFA 140 has PCs, Macintoshes, and laser printing; and (3) the Terminal Labs in BA-110 and BA-113 have X-Terminals and laser printing.

Student computing and e-mail accounts are available through a student account system. This system allows enrolled SDSU students to create their own accounts via the Internet from computer or terminal on campus or via a modem from off campus.

A World Wide Web home page is available at <http://www.sdsu.edu/>.

Alumni Association

The SDSU Alumni Association is a non-profit organization 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 and More, access to SDSU's Career Services for a nominal fee, and a subscription to SDSU Magazine, and Aztec update: publications for alumni and friends of the University.

In addition, the Alumni Association sponsors The Montys (annual awards event honoring alumni and faculty of the University), provides scholarships for students, organizes Homecoming, sponsors Career Panels, provides input regarding University programs and policies, and provides excellent networking opportunities through a myriad of events.

For further information, phone the Alumni Office at (619) 594-2586.

Associated Students of San Diego State University

The Associated Students of San Diego State University (A.S.) is a unique, full-service organization. The A.S. provides a variety of programs, services and activities for SDSU students as well as faculty, staff, alumni, and the public. Managed by elected student executives, the Associated Students programs range from student employment and government, to recreation, entertainment and child care. An independent, not-for-profit corporation, it is funded by the student activities fee and revenues collected from programs and services. Associated Students can be reached by calling (619) 594-6555.

Student Government. The Associated Students sponsors extensive student leadership programs designed to encourage active student participation in the decision-making policies of the University. The A.S. Council is the voice of the SDSU student body. Composed of one representative per 1500 students and four executive officers, the Council is responsible for the A.S. \$10 million annual budget and for formulating policy. Elections held each semester allow for the selection of individuals to fill one-year terms on the Council. Meetings of the A.S. Council are weekly, open sessions.

Other student government activities include monitoring academic policies and managed programs; appointments to educational or campus-related committees; lobbying to provide student input to city, county, state and federal governments; and representing SDSU's interests with the California State Student Association. Call (619) 594-6487 for more details about student government programs.

Aztec Center. The hub of student activity at SDSU, Aztec Center is the headquarters of the Associated Students and its staff. Aztec Center features study lounges, meeting and conference rooms, the Campus Information Center, the Ticket Office and businesses that include Council Travel, Enterprise Rent-A-Car, and USE Credit Union. The Center also houses Monty's Den, a popular campus eatery and meeting place that offers many food selections. For more information, call (619) 594-6551.

Cox Arena at Aztec Bowl. This new facility features seating for over 12,000 people and hosts SDSU basketball and volleyball games in addition to community events, concerts, graduation ceremonies, conferences, sports shows, and more. State-of-the-art staging and sound systems, along with deluxe dressing rooms. VIP lounges and meeting rooms are also available for rental. Full-service box office and TicketMaster location for events throughout California. Adjacent to the Aztec Recreation Center in the heart of the SDSU campus with nearby parking for 2,000 vehicles. Call (619) 594-0234.

A.S. Recreation Programs. Associated Students manages most of SDSU's recreation and leisure programs. Offered at affordable prices, they are also open to the public, as well as students, faculty, staff, and alumni.

Aztec Recreation Center (ARC). The ARC is brand new and beautiful! Featuring four full-size gyms; a 30-foot climbing wall; 21,000 square feet of cardio, aerobic, dance, and weight rooms; outdoor equipment rentals; a 52" TV and lounge area; plus locker rooms with full towel services and saunas. Membership includes unlimited access to recreation facilities, aerobics, cardio and weight rooms, racquetball, wallyball, swimming, and intramural sports. Additional programming offered at minimal fees with a wide variety of leisure classes such as the arts, dance and music, food and beverage, health and fitness, martial arts, horseback riding, tennis and rock climbing. Economical membership fees start at only \$11.00 per month. Call (619) 594-PLAY for complete schedules and membership information.

Aztec Center Bowling and Games. One of the most affordable places on campus. This newly renovated facility includes AMF computer-automated scoring, over 40 video games, billiards, table tennis, and leagues. Also available for parties. Call (619) 594-6561.

Mission Bay Aquatic Center. The world's largest instructional waterfront facility, located at 1001 Santa Clara Point in Mission Bay Park, offers classes and recreational opportunities in surfing, sailing, windsurfing, waterskiing, rowing, wake boarding, and more. Equipment rentals and facilities for group meetings or barbecues are also available. Bus transportation from SDSU available on Transit Route 81. Call (619) 488-1036.

Aztec Adventures. Located in the Aztec Recreation Center complex, this outdoor adventure program offers camping, backpacking, rock climbing, canoeing, sea kayaking, and skiing outings. Also features excursions such as Baja whale watching, surfing safaris, and nature awareness weekends. Trips are always led by experienced guides or instructors. Most outings include transportation, food, group equipment, and all permits or fees. Outdoor rental equipment services are also available. Call (619) 594-6222 for more information and trip schedules.

Recreational Sports. An extension of the Aztec Recreation Center (ARC), Recreational Sports offers the popular Sport Clubs program - and free racquetball, wallyball and swimming to ARC members. The golf driving range, batting cage, and equipment rentals are also available for minimal fees. Non-ARC members can participate in all programs at slightly higher prices. Located at SDSU across from the ARC in 196 Peterson Gym. For more information, call (619) 594-6424.

Child Care Programs. Associated Students provides child care and preschool learning programs through two facilities: the Campus Children's Center and the Faculty/Staff Children's Center. Programs range from part-time to full-time care for children ages six months to five years, with all programming provided by expertly trained teachers and staff members. For more information, call (619) 594-7941 or 594-6359.

Open Air Theatre and Entertainment. A.S. offers multiple programs that provide fun and versatile entertainment. The 5,100 seat Open Air Theatre features regular performances to sellout crowds including concerts, lectures, and symphony performances. Call Aztec Center Ticket Office, (619) 594-6947 for performance schedules.

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 12 sports for women (basketball, crew, cross country, golf, soccer, softball, swimming, tennis, indoor/outdoor track and field, volleyball, and water polo) and seven for men (baseball, basketball, football, golf, soccer, tennis, and volleyball). As a National Collegiate Athletic Association (NCAA) Division I program, Aztec athletic teams contend at the highest level of intercollegiate competition. All of the teams except men's volleyball and soccer compete in the 8-member Mountain West Conference. Men's volleyball and soccer are members of the Mountain Pacific Sports Federation.

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 hundred-thousand 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.

Student Athlete Support Services Athletics 215, (619) 594-4743

Involvement with inter-collegiate 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. 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.

Aztec Shops, Ltd.

(Campus Store, Food Services, Copy Services)

Aztec Shops, Ltd. is a non-profit auxiliary that was established to serve the San Diego State University community in 1931. It operates on-campus services such as The Campus Store and all food service operations, and off-campus it operates Aztec Store and More in Fashion Valley Center. It also operates stores at SDSU/IVC, CSU San Marcos, and Imperial Valley College. It is governed by a Board of Directors composed of faculty, students, and staff of SDSU. Aztec Shops is not funded by the State of California or the University.

The Campus Store houses more than 5,000 required textbook titles each semester (which includes the largest selection of used textbooks in the state), as well as assigned class materials, reference works, school supplies, computer supplies, software and hardware (most at educational prices), SDSU items, and a selection of over 35,000 general interest books. The Pulse, located inside The Campus Store, offers a wide selection of copying and other related needs. A large selection of art supplies may be found at Art Etc., which is located in the Art Building on campus.

Aztec Shops Food Services operates over 17 restaurants on the SDSU campus. This includes a newly-renovated East Commons building that houses Aunt Mary's Corner Baker, a coffee and pastry bar; SubConnection, offering freshly-made deli sandwiches; House of Tsang, an Asian restaurant; Casa del Sol, a fresh-Mex concept; and a full-service McDonald's. Also available on campus are DJ's Deli, KFC, and Taco Bell in West End Plaza and Betty's Hotdogger near the Art Building. Aztec Shops leases space to Sbarro, Arby's, Don Diego, and Creative Juices in Aztec Center, as well as Allegro and Nectar Juices in West End Plaza. The residential dining program is housed at West Commons and features an all-you-care-to-eat dinner program. Questions on this program can be directed to the Meal Plan Office on the lower floor of the East Commons building.

In addition to the varied restaurant options, the SDSU campus has four Monty's Market convenience stores, including a 3,000-square foot "mega-store" in East Commons. All stores carry a wide variety of grab-n-go sandwiches and salads; Monty's Market at Chupultepec also features a grill.

Aztec Shops is dedicated to providing quality services to the campus community. Questions or concerns may be directed to the corporate offices on the second floor of the East Commons building.

The Center for Bio/Pharmaceutical and Biodevice Development

The Center is a new interdisciplinary center focusing on the development, manufacturing, production, processing, and marketing of biotechnological, biopharmaceutical, pharmaceutical, in vitro diagnostic and medical device products. As an administrative, instructional, and research entity, it incorporates faculty and programs from key partnering departments within the Colleges of Sciences, Engineering, Business Administration, Health and Human Services, Professional Studies and Fine Arts, Education, and Arts and Letters. The Center addresses research and workforce needs of companies in their transition from research and development into manufacturing and production, with an additional focus on the overarching legal, ethical, and regulatory elements that both guide and restrict the industry. The Center has a management structure similar to a bioscience company, with section directors for regulatory affairs, biopharmaceutical marketing, bioprocessing/manufacturing, QA/QC, etc., each with research and capstone professional graduate degrees overlaying a cluster of specific certificate programs, and degree emphases, as well as continuing education programs for existing corporate employees. Activities under the Center also include the acquisition of new training and research facilities, in some cases, fermentation, cell culture, small molecule synthetic, and pilot plant scale facilities, as well as the establishment of a biotechnology business incubator. The Center employs long-distance telecommunications to corporate, government, and other university sites within California, between its academic partner, and with several

international partners. The Center interfaces intensively with the California State University Program for Education and Research in Biotechnology (CSUPERB) providing novel capstone training experiences for CSU biotechnology students.

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

A. Stephen Dahms, Director

The California State University Program for Education and Research in Biotechnology (CSUPERB) exists to provide a coordinated and amplified development of biotechnology research and education within the university system; to foster competitiveness both on the state and national levels; to facilitate training of a sufficient number of biotechnology technicians and scientists; to catalyze technology transfer and enhance intellectual property protection; and to facilitate the acquisition and long-term maintenance of state-of-the-art biotechnology resource facilities across the university, such as the Microchemical Core Facility and the Macromolecular Structural Analysis Resource Center, both localized at SDSU. It facilitates interdisciplinary cooperative activities between the departments of Biology and Chemistry on all campuses and between faculty and from a number of allied academic and research units such as bioengineering, agricultural biotechnology, environmental and natural resources, molecular ecology, and marine biotechnology. It also serves as the official liaison between the CSU and industry, government, the Congressional Biotechnology Caucus, and the public arena in biotechnological matters. CSUPERB operates through a Director and an Associate Director, an Executive Committee of 11, and a Governing Board composed of 50 representatives of academic and research units from the 23 campuses.

Center for Community-Based Learning

The Center for Community-Based Learning (CCBL) serves faculty, students, and community organizations by providing a link to integrate community service programs with classwork, giving students unparalleled insight into community needs. The CCBL is a supportive and collaborative force for the campus and the community to come together for shared endeavors and goals.

Community-based learning, also known as service learning is a form of experiential education combined with the ethic of giving back to the community. The goals of the CCBL include assisting and supporting faculty as they make community service part of their classwork, and helping individual students and student organizations identify places where they can directly address community needs.

The CCBL serves as a central location on campus for students, their clubs, faculty and staff to plan and implement community projects. To aid in those efforts, the CCBL has developed several resources and services to include:

- Relational databases of faculty and courses involved in community-based learning;
- A listing of community activities meeting student volunteer or service needs;
- A bank of community projects suitable for faculty to include in their courses;
- A listing of grants related to community-based and experiential learning;
- A resource library for research, assessment, grant writing, course design, focusing upon experiential and community-based learning;
- A place for faculty and staff to meet to discuss service-learning curriculum;
- Assessment tools such as campus-wide surveys of faculty interest and learning; outcomes of individual courses.

The CCBL is located in Scripps Cottage. For more information, contact the CCBL at (619) 594-0807, on the World Wide Web at www.sa.sdsu.edu/ccbl, or EMAIL at ccbl@mail.sdsu.edu.

The June Burnett Institute for Children, Youth, and Families

6310 Alvarado Court, San Diego, CA 92120, (619) 594-4756

The June Burnett Institute was created in 1985 at the San Diego State University Foundation from a \$1.5 million bequest from the estate of June Estelle Burnett. The Institute is dedicated to developing the potential of all children, youth, and parents in a manner that is sensitive and responsive to cultural, social, and economic differences and needs. The Institute fosters cooperation and collaboration through interdisciplinary/interprofessional approaches which promote the well-being of children, youth, and families through prevention, intervention, and volunteer-based services and which incorporate training and evaluation as integral elements. An advisory board composed of SDSU faculty and community members directs the activities of the Institute in cooperation with 15 core staff, 30 project staff, 117 stipended volunteers, eight doctoral level consultants, three graduate interns, and 18 subcontracts with community service organizations.

The Institute's Prevention Services Division coordinates the Families and Schools Together Program (FAST) for parents of elementary students and Home/School Partnership for parents of Middle School students. Both parent projects entail collaborative partnerships with community agencies, ethnically identified organizations and PTA's.

The Institute's Volunteer Services Division administers the California YMCA/CSU PRYDE AmeriCorps Consortium (a collaboration of five urban YMCA's and CSU campus training partners in Los Angeles, Long Beach, Oakland/East Bay and San Francisco), the Safe Zones for Learning-AmeriCorps Evaluation Project (a collaboration of 15 agencies in the Mid-City/City Heights area of San Diego), and an evaluation project focusing on Mid-City for Youth, a collaboration of over 100 organizations in the Mid-City area.

The Institute's Intervention Services Division, in cooperation with the San Diego Juvenile Court, the County of San Diego, and the Weingart Foundation, coordinates the San Diego Choice Program which serves approximately 500 court-involved delinquent youth annually who are referred by the County departments of Probation and Social Services, and who reside in the areas of Mid-City/City Heights, National City, Chula Vista, Escondido, and Vista.

The Burnett Institute Faculty Fellows Program, in conjunction with the Vice President for Academic Affairs and each fellow's college dean, sponsors between four and six faculty members who wish to assist the Institute strengthen service, training or evaluation efforts in the community.

Childrens Centers

The Associated Students' Campus Children's Center and Faculty Staff Children's Center provide child care for children of SDSU students, faculty, and staff. The academic year program is a parent participation program and gives priority to children of students. Other factors that determine priority are financial need and application date. The Campus Center serves children six months through six years of age, who are in good health. The year-round program serves children 18 months to six years of age and gives priority to children of faculty and staff. All applications are considered regardless of race, religion, creed, sex, national origin, or handicap.

Tuition for children enrolled during the academic year is determined on a sliding fee scale based on family size and income. The year round program fees are a set fee.

The program is designed so that a variety of activities are offered that will foster the child's social, emotional, intellectual, and physical development and help the child view himself/herself and the environment positively.

The programs are staffed by professional and student employees, volunteers and Child Development majors. Parents of children enrolled in the academic year program make a weekly contribution of time as teachers in the classroom and serve on a fundraising/publicity committee. Parent participation is not required in the Faculty/Staff Children's Center. Parents have the opportunity to serve on the Children's Center Board, which is composed of parents and other campus representatives.

The hours of operation are: Campus Preschool 7:30 a.m. to 5:30 p.m., Monday through Thursday, 7:30 a.m. to 4:00 p.m. Friday; Toddler Classroom 8:00 a.m. to 4:00 p.m. The Infant Classroom is open Monday through Friday 8:00 a.m. to 2:00 p.m. The Faculty/Staff Preschool is open 7:00 a.m. to 6:00 p.m., Monday through Friday. Call (619) 594-6359 for more information.

Communications Clinic for Speech, Language, and Hearing Disorders

Administered by the Department of Communicative Disorders. The Clinic provides assessment and remediation services for SDSU students, staff, faculty, and the community. Comprehensive diagnostic and treatment programs are available for children and adults, who may present such communicative difficulties as delayed speech/language development, voice, fluency or articulation disorders, aphasia, cleft palate, cerebral palsy, loss of communication function, augmentative communication needs, hearing loss and deafness. Also provided are services for bilingual/multicultural clients and speakers of English as a second language. Audiologic services provided by the Clinic include hearing assessment, hearing aid evaluation and selection, assistive listening device evaluations, earmolds, ear protectors, hearing conservation and speech reading/aural rehabilitation therapy. The clinic is located at 6330 Alvarado Court, Suite 100, (619) 594-6477.

Developmental Writing Program

The Developmental Writing program, in the Department of Rhetoric and Writing Studies, offers assistance to all students at any university level, including bilingual and international students, who wish to improve reading and writing skills. The program's services are available on an enrollment basis only.

In addition, the program assists students in completing the University's writing competency requirement. The University requires students to demonstrate writing proficiency consistent with its established standards and, accordingly, requires all entering students to pass various writing competency tests. Students who fail 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 and continue until successfully completing it.

General Mathematics Studies

The General Mathematics Studies program offers assistance to all students at any university level who wish to improve their mathematics skills. These services, which are available on an enrollment basis only, are designed to assist students in completing the CSU ELM and SDSU Mathematics Competency requirements. The University requires all students to demonstrate mathematics proficiency consistent with its established standards, and accordingly, requires all entering students to pass these mathematics competency requirements. In particular, students who fail the ELM must enroll in the appropriate General Mathematics Studies course in their first semester at SDSU and continue until they have satisfied this requirement; students have two semesters only to complete this requirement.

Instructional Technology Services

Instructional Technology Services provides support to faculty in the design, selection, production, and distribution of instructional technology. Service and support are provided in the areas of Instructional Development, Multimedia Production, Instructional Resources, Technology Systems and Baseline Access, Training and Support (BATS).

The Instructional Development program offers professional assistance in instructional design, course design, teaching techniques and assessment. Services include: assistance in development of instructional materials; assessing and selecting instructional methods; facilitating course design; assistance to faculty who wish to analyze their instruction; workshops on teaching skills and

techniques; and a facility for faculty to produce their own media and to learn about new technologies.

Multimedia Production assists in the design and production of instructional, research, and other campus related materials. Services include development and production of instructional videotapes; graphic and photographic support of instruction, research and publication; and assistance in development of multimedia materials.

Instructional Resources provides support in the selection, use and distribution of instructional materials and audio-visual equipment. Services include consultation on selection and use of media and equipment for classroom use; check-out of media and equipment for classroom use; acquisition of new videotapes, videodiscs, and CD-ROM's for instructional use; on-line access to our media catalog containing more than 7,000 titles; and maintenance and repair of audiovisual equipment.

Technology Systems provides support in the design, installation, maintenance, and operation of audiovisual systems in classrooms. Services include operation of the closed-circuit television system; installation and maintenance of audiovisual equipment in classrooms; design and installation of "Smart Classroom" systems; operation of videoconferencing systems for instructional and administrative use; and operation of a presentation room for high-quality video and data projection.

The Baseline Access, Training and Support (BATS) program provides students, faculty, and staff with training in the uses of hardware and software systems, and ongoing professional and technical support for utilization of computer resources at SDSU. Services include operation of computer training facilities, "hands-on" workshops for faculty, staff and students, and operation of Computer Help Desks for faculty and staff.

Office of International Programs

In recognition of the rapidly expanding number and importance of international activities on the San Diego State University campus, the Office of International Programs has specific 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. In addition to coordinating all international faculty and student exchange programs, the Office of International Programs 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, San Diego State University has developed a continuing program of faculty exchange with partner universities worldwide. Currently, the University has formal arrangements to exchange faculty and administrators periodically with universities across the globe. Over 100 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.

International Student Exchanges

In addition to the CSU International Programs, San Diego State University has 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 exchange agreements with many international partners.

For more information about the University's international programs and international exchanges, contact the Office of International Programs, (619) 594-1354. EMAIL: intnatprog@sdsu.edu or visit our website at <http://www-rohan.sdsu.edu/dept/intlprog/index.html>

Library

Administration

Interim Dean, Library: Karen Kinney
Director of Information Systems and Technology: John B. Ross
Director of Administrative Operations: Helen Henry
Director of Development: Leslie F. DiBona

Library Faculty

Emeritus: Barclay, Chan, Crisley, C., Dickinson, Fields, Goodwin, Granrud, Greene, Harris, Hoover, Johns, Kinsey, Lamb, Leerhoff, Martinez, McAmis, Murdock, Neyndorff, Pease, Posner, Sandelin, Schalles, Shira, Sonntag, Szabo, West

Librarians: Cargille, Coleman, Dintrone, Fikes, Harkanyi, Muroi, Turhollow, White

Associate Librarians: Baber, Carande, Friedman, Goynes, Harley, McPhail, Palsson, Perkins, Puerto, Rogers, Wilson

Senior Assistant Librarians: Dreger, Tumlin

The Library supports the curricular and research needs of the University community through the development of pertinent collections and the provision of services designed to facilitate access to information. Service desks are located in these units: Circulation, General Reference, Government Publications and Maps, Media Center, Current Periodicals and Microforms Center, Reserve Book Room, Science Reference, and Special Collections. The Library also has a comprehensive instruction program, which includes course-related instruction, Internet workshops, and tours.

The Library has automated acquisitions, cataloging, circulation, and serials control systems. Computer based bibliographic search services provide student/faculty access to over 50 databases directly through library workstations. The Library's Internet Online Network (LION) provides access to the library's databases within the library as well as remotely. The Information Systems and Technology organization utilizes software, network, and workstation technology to make information products available to students, faculty, and staff. Accessible resources include licensed research databases, CD-ROM titles, and global data via the Internet. The group also provides computer accounts to all students, as well as hosting WorldWideWeb pages for students, the University, and the Library (<http://libweb.sdsu.edu/>). The Library operates a student computing facility with over 200 PCs, as well as the student computing help desk which assists students with a variety of computer questions. The Library provides for interlibrary loan through a direct link with several thousand other libraries using the computer and telecommunications facilities of the OCLC bibliographic utility.

The Library's holdings include 1,217,413 monographs and bound periodicals; 623,496 government documents; over 3.9 million microforms; 176,479 maps; 8,887 sound recordings; and 5,075 linear feet of archival papers. The Library receives 4,765 periodical and serial titles, excluding government publications. It is a depository for United States and California government publications, and receives selected United Nations publications.

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 1-800-228-8961 for additional information.

Baccalaureate Degree Completion Program. Sophomores, juniors and seniors who qualify can earn up to \$1200 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 \$1300 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 of 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, NTC BLDG 335, San Diego, CA 92133-6800; telephone (619) 224-2856.

Parking and Transportation

Where possible, carpooling or use of alternate modes of transportation is recommended. For carpool information call (619) 594-5224.

San Diego Transit has six bus routes connecting the metropolitan area with service to the University Transit Center. These are routes 11, 13, 55, 81, 115, and 936. Monthly bus passes can be purchased at the Aztec Center Ticket Office. The San Diego Transit office at (619) 233-3004 will provide further information concerning bus routes, fares, and services.

Visitor parking is available in six metered lots. On-campus parking for students and employees is by permit only. Parking structures are located on the south, east and west perimeters of the campus, in addition to student and faculty/staff parking lots. A free shuttle bus service to remote parking lots operates daily during the academic year. Major events at Cox Arena may require parking location adjustment. Visitors are directed to the Information Kiosk on Campanile Drive for directions to appropriate parking areas. For further information on parking at the San Diego campus, contact the Department of Public Safety, (619) 594-6671. For visitor parking at the Imperial Valley Campus, call (760) 768-5500.

San Diego State University Foundation

The San Diego State University Foundation was incorporated in 1943 as an auxiliary organization authorized by the Education Code of the State of California. It is a nonprofit corporation, self-financed, and chartered to provide and augment programs that are an integral part of the educational mission of San Diego State University.

The Foundation serves the University in the following major areas:

- Development and administration of grants and contracts for faculty and staff research and educational projects;
- Administration of funds for more than 1,500 community service oriented programs including KPBS educational television and radio stations, and the College of Extended Studies;
- Financial administration of gifts and donations;
- Investment of endowment and other funds;
- Financial administration of student scholarship and loan funds;
- Management of a real property program whereby the Foundation acquires and provides space for grant and contract activity and leases property to the University and other campus auxiliaries;
- Development of property adjacent to the campus;

Provides funds for the support of University programs, such as the Grant-in-Aid for Research Program for faculty, and financial support for graduate students;

Administration of activities such as the June Burnett Institute for Children, Youth, and Families, and the Fred J. Hansen Institute for World Peace;

Oversight of KPBS TV and FM stations.

The 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 directors is to establish policies and guide the corporation in achieving its objectives.

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. Although high-quality manuscripts from any source will be considered, 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 postmodernism. In addition to books, the Press also publishes under its imprint the journals *Fiction International*, *Poetry International*, and the *Journal of Borderland Studies*.

San Diego State University Press imprint is controlled by an editorial committee of scholars, appointed by the Vice President for Academic Affairs and the Senate. Financial accounting and coordination are provided by the San Diego State University Foundation.

Student Success Programs

Thomas B. Day Freshman Success Programs

Gene G. Lamke, Director

Endowed by Bernard and Dorris Lipinsky, the Thomas B. Day Freshman Success Programs were designed to offer new freshmen opportunities which will help lay a strong foundation for them to be successful in their college work. TBDFSP is a partnership program sponsored by both Academic and Student Affairs, with the academic aspects coordinated by the Division of Undergraduate Studies and the housing and leadership aspects by the Student Resource Center.

University Seminar. Offered each fall semester, this one-unit elective course (General Studies 100) provides new students the opportunity to interact with faculty in a small group setting within an academic framework. Students acquire study and interpersonal skills necessary for academic and personal success. They hone their critical thinking abilities, learn how to communicate effectively with professors and gain experience in goal-setting and academic planning. The curriculum includes special sessions giving students knowledge of campus resources including the library, academic advising, career planning, health and wellness services. For more information, contact the Thomas B. Day Freshman Success Programs office, Administration, Room 201, (619) 594-3212.

Integrated Curriculum. Offered in conjunction with various colleges, the Integrated Curriculum is an academic package of courses designed to help freshmen adapt to SDSU's academic standards and achieve their academic goals. Students enroll in one of the packages which then becomes their set of classes for the semester. Some of the IC bundles are designed for specific majors and include core courses for that particular major. Others feature General Education courses as their academic centerpiece. Also included is a section of the University Seminar course as well as partner courses in writing and mathematics. For more information, contact the Thomas B. Day Freshman Success Programs office, Administration, Room 201, (619) 594-3212.

Living/Learning Center. The LLC is a residence hall option in which freshmen live together in Maya and Olmeca Residence Halls. LLC students enjoy comfortable living accommodations, a computer room, study lounge, recreation, and television rooms. Participants in

this option are automatically enrolled in an Integrated Curriculum which includes the University Seminar course. In the LLC students take advantage of special advising, workshops, and study information. Contact the Student Resource Center: Student Services, Room 1602, (619) 594-5221 for more information.

Emerging Leader Program. This program is designed for freshmen who are interested in developing their leadership potential and becoming active and involved on campus and in the community. Students attend seminars dealing with issues concerning team building, values, ethics, multicultural awareness, personal responsibility, global opportunities, and effective communication. They participate in the SDSU Leadership Institute, community service projects and a variety of leadership meetings and conferences. For more information, contact the Student Resource Center, Student Services, Room 1602, (619) 594-5221.

Faculty/Student Mentoring Program

Randi E. McKenzie, Director

The Faculty/Student Mentoring Program is designed to provide academic and personal support to students who are striving to achieve their full potential under economic, educational, and/or environmental challenges. The program brings together faculty and student mentors to assist incoming freshmen and first-time transfer students adjust to the campus culture. The program seeks to strengthen and sustain students in their educational and career goals and help make college a rewarding experience. Each College has a unique Faculty/Student Mentoring Program. In addition, there is a program for students who have yet decided upon a major and for those studying at the Imperial Valley Campus. For more information, call (619) 594-0474.

Travel Study Programs

London Semester Academic Program

The London Semester academic program operates through a consortium of CSU campuses. It is jointly administered by the Division of Undergraduate Studies and the Colleges and offers students the opportunity to study for a semester in London, while earning SDSU resident credit. Courses satisfying General Education requirements are taught by SDSU and other CSU faculty. To be eligible, students must be sophomores, juniors, or seniors in good academic standing. For further information, contact the Division of Undergraduate Studies, Administration, Room 201.

Paris Semester Academic Program

The Paris Semester academic program is administered by the Department of French and Italian Languages and Literatures. It offers students the opportunity to study for a semester in Paris, while earning 12 units of SDSU resident credit. Courses satisfying General Education, French, and International Business requirements are taught by SDSU and Paris-based 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 French and Italian Languages and Literatures, Business Administration 304.

Salamanca Semester Academic Program

The Salamanca Semester academic program is administered by the Department of Spanish and Portuguese and the Division of Undergraduate Studies. It offers students the opportunity to study for a semester in Salamanca (Spain) while earning 12 units of SDSU resident credit. Courses satisfying Spanish major and minor requirements are taught by SDSU and Salamanca-based faculty. To be eligible, students must be sophomores, juniors, or seniors in good standing with a minimum of two college semesters of Spanish. For further information, contact the Department of Spanish and Portuguese Languages and Literatures, Business Administration 403, or the Division of Undergraduate Studies, Administration, Room 201.

Academic Organization

Colleges

Arts and Letters

Business Administration

Education

Engineering

Health and Human Services

Professional Studies
and Fine Arts

Sciences

Imperial Valley Campus

College of Arts and Letters

Administration

Dean: Paul J. Strand
Associate Dean: Carol O. Sweedler-Brown
Assistant Dean for Student Affairs: Leslie S. Johnson
Assistant Dean for Development: Barbara London

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

Geography

Master's Degrees

Anthropology (M.A.), Asian 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.), History (M.A.), Latin American Studies (M.A.), Latin American Studies (M.B.A./M.A.; jointly with the College of Business Administration), Liberal Arts (M.A.), Linguistics (M.A.), Philosophy (M.A.), Political Science (M.A.), Sociology (M.A.), Spanish (M.A.), Women's Studies (M.A.).

Bachelor's Degrees

Afro-American Studies (B.A.), American Studies (B.A.), Anthropology (B.A.), Asian Studies (B.A.), Classics (B.A.), Comparative Literature (B.A.), Economics (B.A.), English (B.A.), European Studies (B.A.), French (B.A.), Geography (B.A.), 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.), Linguistics (B.A.), Mexican American Studies (B.A.), Philosophy (B.A.), Political Science (B.A.), Religious Studies (B.A.), Russian (B.A.), Russian and Central European Studies (B.A.), Social Science (B.A.), Sociology (B.A.), Spanish (B.A.), Urban Studies (B.A.), Women's Studies (B.A.).

Minors

African Studies, Afro-American Studies, American Indian Studies, American Studies, Anthropology, Asian Studies, Chinese, Classics, Comparative Literature, Economics, English, Environment and Society, European Studies, French, Geography, German, History,

Humanities, Italian, Japanese, Judaic Studies, Latin American Studies, Linguistics, Mexican American Studies, Middle East Studies, Philosophy, Political Science, Portuguese, Religious Studies, Russian, Sociology, Spanish, United States-Mexican Border Studies, Women's Studies.

Preprofessional Curriculum

Prelegal

Certificate Programs

Applied Linguistics and English as a Second Language (ESL), Children's Literature, Geographic Information Science, Spanish Translation Studies, Technical and Scientific Writing, United States-Mexico Border Studies.

Research Centers and Institutes

Africana Center for Cultural Literacy and Research

Norman E. Chambers and JoAnne Cornwell, 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.

The Africana Center is housed in the Department of Africana Studies and can be reached by calling the department office at (619) 594-6531.

Institute for Built Environment and Comparative Urban Research (BECUR)

Lawrence A. Herzog, Director

The main purpose of the Institute for Built Environment and Comparative Urban Research (BECUR) is to: (1) study the impact of culture on the design and shape of the urban built environment; and (2) understand how cities in different cultural settings are being transformed by global processes. BECUR provides a forum for research and dialogue among SDSU faculty and students on the cross-cultural nature of urban space and urban place. The Institute is administered by the College of Arts and Letters, and the College of Professional Studies and Fine Arts. Among its activities, the Institute promotes public lectures and conferences, research projects, and networking among urbanists, social science, planning, design and architectural scholars both in the region, as well as in other parts of the world. The Institute is located in Professional Studies and Fine Arts 177; (619) 594-6964.

China Studies Institute

William G. Tong, Director

The China Studies Institute coordinates and supports on-campus teaching and research related to China. The Institute develops and fosters faculty and student exchange programs with Chinese universities and institutions of higher learning. Various cultural programs on China and activities on campus and in the community promote cultural awareness and understanding. The development of Chinese 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.

Donald I. Eidemiller Weather Station
Edward Aguado, Director

The Donald I. Eidemiller Weather Station serves as a teaching and research resource. The station also archives monthly and annual data published by the National Climatic Data Center and has been observing and recording local weather information for more than 35 years.

Center for International Business Education and Research (CIBER)

Allan R. Bailey and Paul J. Strand, Executive Co-Directors
Michael L. Hergert and Steven Loughrin-Sacco, Program Co-Directors
David Earwicker, Associate Director

The Center for International Business Education and Research (CIBER), one of 27 such centers of excellence in the United States, was established in 1989 under the auspices of a grant from the U.S. Department of Education and is administered by the Colleges of Arts and Letters and Business Administration.

CIBER promotes: (1) interdisciplinary programs which incorporate foreign language and international studies training into business, finance, management, communications systems, and other professional curricula; (2) interdisciplinary programs which provide business, finance, management, communications systems, and other professional training for foreign language and international studies faculty and advanced degree candidates; (3) evening or summer programs, such as intensive language programs, available to members of the business community and other professionals, which are designed to develop or enhance their international skills, awareness, and expertise; (4) collaborative programs, activities, or research involving other institutions of higher education, local educational agencies, professional associations, businesses, firms or combinations thereof, to promote the development of international skills, awareness, and expertise among current and prospective members of the business community and other professionals; (5) research designed to strengthen and improve the international aspects of business and professional education and to promote integrated curricula; and (6) research designed to promote the international competitiveness of American businesses and firms, including those not currently active in international trade.

The Center is located in Business Administration 428, (619) 594-6023, (FAX) 594-7738; CIBER @ mail.SDSU.edu

International Population Center
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.

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. The telephone number for the center is (619) 594-8040.

Institute for International Security and Conflict Resolution

Alan R. Sweedler and Dipak Gupta, Co-Directors

The SDSU Institute for International Security and Conflict Resolution (IISCOR) encourages and facilitates teaching and research in the multidisciplinary area of international security and conflict resolution. Specifically, topics such as nuclear armaments, international and intranational conflict, sociopolitical violence, and global environmental issues as they relate to security are covered.

The Institute is a joint effort of the Colleges of Arts and Letters, Professional Studies and Fine Arts, and Sciences. IISCOR is administered by two co-directors, advised by an executive committee consisting of faculty members representing the different disciplines that provide input into the study of international security and conflict resolution.

The Institute promotes teaching and research by organizing public forums, faculty and student seminars, developing appropriate curricula for undergraduate and graduate instruction and facilitating research and scholarly activities. SDSU offers, through IISCOR, a multidisciplinary Bachelor of Arts degree in International Security and Conflict Resolution. More information is available by calling the IISCOR office at (619) 594-6240.

Latin American Studies
Thomas M. Davies, Jr., Director

The Center for Latin American Studies seeks to encourage teaching and research related to Latin America. It has primary responsibility for the administration of the Latin American undergraduate and graduate degree programs. The U.S. Department of Education has designated the center as one of thirteen "National Resource Centers for Latin America," in consortium with the Center for Iberian and Latin American Studies at the University of California, San Diego. In conjunction with this award, the Center administers programs that focus on a multi-disciplinary and problem-oriented approach to teaching and research activities focused on Latin American Studies; the development of innovative methods of instruction in Spanish and Portuguese; the provision of informative 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.

Lipinsky Institute for Judaic Studies
Lawrence Baron, Director

The Lipinsky Institute for Judaic Studies, located in the College of Arts and Letters, serves to coordinate and support teaching and research in modern Jewish history and contemporary Jewish and Israeli affairs. Established with contributions from the San Diego community, the Institute provides financial support for an annual visiting professor from Israel, the annual Galinson-Glickman symposium on contemporary Israeli issues, and the Robert Siegel Memorial Lecture. It also complements regular course offerings by sponsoring lectures, developing library resources, fostering research, and conducting other activities that will promote the advancement of Judaic studies in the University and in the San Diego community.

Institute for Regional Studies of the Californias
Paul Ganster, Director

The Institute for Regional Studies of the Californias (IRSC) provides the University with a neutral forum for the investigation, discussion, and dissemination of information about the United States-Mexico border region. Although the Institute's focus is on the three-state region of California, Baja California, and Baja California Sur, it is also concerned with Mexico and important issues in the United States-Mexico relationship. In addition, IRSC monitors border regions elsewhere in the world. Created in 1983, the Institute has undertaken multidisciplinary research projects on significant regional concerns including transborder environmental issues, policy perspectives on the California-Mexico relationship, and the *maquiladora* industry. The Institute also maintains a research collection on the border region and takes an active role in Latin America and Mexico-related professional organizations. IRSC publishes the *Journal of Borderlands Studies*, as well as papers and monographs on border-related issues and topics.

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 institutions. IRSC has under way a major project on border environmental issues and public policy. IRSC serves as the SDSU link to the Southwest Center for Environmental Research and Policy, a congressionally established consortium of universities for research and policy studies on environmental issues of the border. The Institute is located in Nasatir Hall 103.

Social Science Research Laboratory
Douglas S. Coe, Director

The Social Science Research Laboratory (SSRL) was founded in 1974 to support academic computing and social research within the College of Arts and Letters (CAL), the University, and the regional community. SSRL is organized into six units: Instructional Services, Research Services, Systems Support Group, CAL Help Desk, Data Resources, and South Coastal Information Center (SCIC). Each unit develops and administers programs, within the overall context of SSRL's mission, that serve the University and the community. The department employs ten full-time staff and over sixty part-time employees classified as teaching/graduate assistants, laboratory consultants, research assistants and data collection/reduction specialists.

Instructional Services works closely with faculty to assimilate technological resources into the curriculum and to support academic computing among students and faculty. This is accomplished through four programs: (1) Social Science 201A, 201B, 201C, 201D courses on the use of the statistical package for the social sciences, database, spreadsheet, and Internet resources, (2) non-credit workshops on the use of selected software applications, (3) class presentations at the request of faculty to support computer-related instructional assignments, and (4) on-demand consultation for individual users of open-access computing laboratories.

Research Services offers a complete range of public opinion polling and survey research services, including sample design, data collection, data reduction, and data archiving. The section maintains computer systems to support faculty research. Undergraduate internships and research assistant positions are available.

Data Resources assists faculty and students in the use of archived research, datasets from a variety of on-line information resources, and provides database programming services for specific applications. Principal sources of archived and electronically accessible information include the Inter-University Consortium for Political and Social

Research (ICPSR), the Social Science Database Archive (SSDBA), the U.S. Census, Field Institute California Polls, the Roper Center for Public Opinion Research and Lexis/Nexis. Assistance is provided for locating, downloading, installing, and subsetting datasets for instructional or research use.

Systems Support Group provides network administration and technical infrastructure support for College of Arts and Letters computing systems. Services include managing computer classrooms, network design, implementation and administration, installing software applications, electronic mail, Internet related software, interfacing peripherals, virus diagnosis, file recovery, disk management, operating systems, and procurement advice. Faculty and staff requests for assistance are initiated and tracked through an on-line work order system.

Help Desk serves as the point of entry for faculty and staff who need assistance with computer related problems. Work order requests for hardware, software, and peripheral problems are logged into an on-line database used to schedule technical services. The Help Desk also conducts an extensive software coaching program for individual faculty and staff in their office.

South Coastal Information Center (SCIC) contracts with the California Office of Historic Preservation (OHP) to provide information management for all cultural resources in San Diego County. SCIC is a source of valuable research data for archaeologists, historians, and architects. Databases in historic resources and prehistoric and historic archaeology are maintained and constantly updated. Site data and building information are electronically stored, and over 3000 historic and archaeological reports are available. Geographic information system software provides accurate mapping of archaeological site data. Student interns master the basics of historic preservation laws and regulations, while learning effective cultural resource information management.

The SSRL is located in Professional Studies and Fine Arts, Room 140.

College of Business Administration

The College of Business Administration and the School of Accountancy are accredited by AACSB—The International Association for Management Education—at both the undergraduate and graduate levels. Several College of Business Administration programs are registered with the International Board of Certified Financial Planners.

Administration

Dean: Michael L. Hergert
Associate Dean and Director of
Graduate Program: Kenneth E. Marino
Associate Dean and Director of
Undergraduate Program: Robert W. Wilbur
Associate Dean, Community Economic
Development: Harold K. Brown
Assistant Dean for Student Affairs: Patricia N. L. Dintrone
Assistant Dean for Student Relations: Jeffrey W. Glazer
Director of Communications: Sara Scott
Director of Development: Christine A. Audette
Director of Resource Management: Debra Tomic

Mission of the College of Business Administration

The mission of the College of Business Administration is to create a learning environment which fosters excellence in business education through innovative programs, applied learning, research, and collaboration with the 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 goals: (1) to create and maintain a highly motivated educational environment for both students and faculty; (2) to evaluate all College activities, including formal classroom and research, in terms of their contributions to effective learning; (3) recognizing the dynamic nature of business and the society it serves, to instill within students an awareness of the necessity to embark on life-long careers of learning; (4) to prepare students for entry-level positions, which will provide advancement opportunities in their chosen careers; (5) to maintain an active, positive working relationship with the regional business community; (6) to offer graduate programs that prepare students for general management positions; and (7) to provide both degree and nondegree midcareer educational opportunities.

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.), Latin American Studies (M.B.A./M.A.; jointly with the College of Arts and Letters).

Bachelor's Degrees

Accounting (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.), Operations Management (B.S.), Real Estate (B.S.).

Minors

Accounting, Business Administration, Finance, Information Systems, Management, Marketing, Operations Management, Real Estate, Small Business Management (available at Imperial Valley Campus only).

Certificate Programs

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

Credential Programs

Teaching major in each business field for the single subject teaching credential.

Research Centers and Institutes

Corporate Governance Institute (CGI)

Mark C. Butler and Craig P. Dunn, Co-Directors

The Corporate Governance Institute (CGI) is an education and research center dedicated to the study and application of corporate governance principles. Founded in 1998 as a joint venture between the College of Business Administration (CBA) and the International Forum for Corporate Directors (IFCD), the mission of the CGI is to enhance the skills of organizational directors and senior executives in the private, public, and not-for-profit sectors through creating and delivering initiatives related to a) Director and executive development, b) research, and c) curriculum innovation. CGI programs focus on identifying "best practices" in all aspects of corporate governance. All CGI initiatives are guided by the principle that corporate leaders hold a primary duty to insure the financial viability of the organizations which they manage, while at the same time taking adequate account of the emerging reality that all institutions, including corporations, are imbedded within communities which justifiably deserve their attention.

The CGI conference room is located in Student Services 3375-A. CGI staff can be reached by telephone at (619) 594-0823, or by e-mail at corporate.governance@sdsu.edu. The CGI website can be accessed at www.sdsu.edu/corporate.governance.

Entrepreneurial Management Center (EMC)

Sanford B. Ehrlich, Executive Director
Richard D. Brooks, Director, Community Relations
Alex F. DeNoble, Director of Academic Programs

The Entrepreneurial Management Center (EMC) serves the emerging growth sector of the regional business community. The growth, development and success of new business ventures is essential to the future of the San Diego region. The mission of the EMC is to assist this sector of the economy through educational programs focused on the application of the underlying principles and perspectives of entrepreneurship offered to students, organizations, and individuals.

The range of entrepreneurial programs offered includes: (1) support for the M.S. and M.B.A. programs specialization in entrepreneurship; (2) individual knowledge and skill development; and

(3) organizational consulting and development. The entrepreneurial topics presented include the outcomes of the entrepreneurial process: the creation of wealth, new enterprises, innovation, organizational change, increased firm value, and organizational growth. The EMC focuses program development on both the entrepreneur and the entrepreneurial process which results in a variety of outcomes essential to economic development.

The EMC sponsors an annual Nasdaq-SDSU Business Plan Competition which provides students with an opportunity to present their business ideas to a distinguished panel of judges. The competition currently involves students from colleges throughout North America.

Center for International Business Education and Research (CIBER)

**Michael L. Hergert and Steven Loughrin-Sacco, Co-Directors
David Earwicker, Managing Director**

The Center for International Business Education and Research (CIBER), one of 27 such centers of excellence in the United States, was established in 1989 under the auspices of a grant from the U.S. Department of Education and is administered by the Colleges of Arts and Letters and Business Administration.

CIBER promotes: (1) interdisciplinary programs which incorporate foreign language and international studies training into business, finance, management, communications systems, and other professional curricula; (2) interdisciplinary programs which provide business, finance, management, communications systems, and other professional training for foreign language and international studies faculty and advanced degree candidates; (3) evening or summer programs, such as intensive language programs, available to members of the business community and other professionals, which are designed to develop or enhance their international skills, awareness, and expertise; (4) collaborative programs, activities, or research involving other institutions of higher education, local educational agencies, professional associations, businesses, firms or combinations thereof, to pro-

mote the development of international skills, awareness, and expertise among current and prospective members of the business community and other professionals; (5) research designed to strengthen and improve the international aspects of business and professional education and to promote integrated curricula; and (6) research designed to promote the international competitiveness of American businesses and firms, including those not currently active in international trade.

The Center is located in Business Administration 428, (619) 594-6023, (FAX) 594-7738; CIBER@mail.sdsu.edu.

Real Estate and Land Use Institute (RELUI)

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.

RELUI's mission is to promote education and research in real estate and land use. In support of this mission, RELUI seeks to (1) support, coordinate, and manage systemwide and intercampus research activities; (2) assist in the development, coordination, and administration of statewide continuing education programs; (3) obtain funding sources for education and research activities; (4) promote the general well-being of undergraduate and graduate study within the CSU system; and (5) maintain liaison with government agencies, private industry, and associated organizations with interest in public policy.

RELUI maintains a research and reference center in the College of Business Administration where specialized real estate and land use related materials are available for use by students and faculty.

RELUI also sponsors an internship program for placement of qualified students with local firms to provide a combined working and learning experience. Additional benefits accrue to interns in the form of academic credits and stipends. For more information, call (619) 594-2301.

College of Education

Administration

Interim Dean: Gordon M. Thompson
Interim Associate Dean: Margie K. Kitano
Interim Associate Dean for Faculty Development and Research: Katherine Randazzo
Assistant Dean for Student Affairs: Barbara E. Allen
Doctoral Programs: Daniel J. Kitchen
Director of Center for Careers in Education: Helen Duffy
Director of Development: Carolyn Warne
Director of Support Services: John R. Summerfruit

General Information

The mission of the College of Education is broad and multidimensional. The College is concerned primarily with preparing teachers, administrators, resource specialists, and support personnel for various educational settings; providing continuing professional educational opportunities for education personnel; continually assessing the quality and appropriateness of all education activities; contributing to the knowledge base of both educational theory and practice through research and scholarship; providing appropriate public service/technical assistance to individuals and agencies locally, regionally, nationally, and internationally; and contributing to the general intellectual climate of the University community. The College has had an ongoing commitment to programs serving culturally diverse communities and bilingual individuals.

The College of Education is organized into six academic units including the School of Teacher Education and the following departments: Administration, Rehabilitation and Postsecondary Education; Counseling and School Psychology; Educational Technology; Policy Studies in Language and Cross-Cultural Education; 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 two additional academic areas. A doctoral program in education is offered jointly with Claremont Graduate University. This unique program features a multicultural education emphasis. Approved teaching credential programs are offered for the multiple subject credential and the single subject credential, as well as for a number of specialist and service credentials.

Curricula Offered

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

Doctoral Programs

Education
Mathematics and Science Education

Master's Degrees

Counseling (M.S.), Education (M.A.),
Rehabilitation Counseling (M.S.)

Bachelor's Degree

Vocational Education (B.V.E.)

Minor

Educational Technology

Teaching and Service Credentials

Credential Program

1. Multiple Subject
2. Multiple Subject Cross-Cultural Language and Academic Development (CLAD) emphasis
3. Multiple Subject Bilingual Cross-Cultural Language and Academic Development (B/CLAD) emphasis: Spanish
4. Single Subject
5. Single Subject Cross-Cultural Language and Academic Development (CLAD) emphasis
6. Single Subject Bilingual Cross-Cultural Language and Academic Development (B/CLAD) emphasis: Spanish

School Service Authorized

Teach in any self-contained classroom, kindergarten through twelfth grade.

Teach in self-contained classrooms and provide Specially Designed Academic Instruction in English (SDAIE) and English Language Development (ELD), kindergarten through twelfth grade.

Teach in self-contained classrooms and in primary language and English, English Language Development (ELD), and Specially Designed Academic Instruction in English (SDAIE).

Teach single subject area in grades kindergarten through twelve.

Teach single subject area in grades K-12 and provide Specially Designed Academic Instruction in English (SDAIE) and English Language Development (ELD).

Teach single subject area in primary language and English in grades K-12 and provide Specially Designed Academic Instruction in English (SDAIE) and English Language Development (ELD).

Specialist Credentials

Reading/Language Arts
Resource Specialist Certificate of Competence
Special Education:
Education Specialist for the Deaf and Hard of Hearing (Department of Communicative Disorders)
Early Childhood Special Education
Mild/Moderate Disabilities
Moderate/Severe Disabilities
Physical and Health Impairments

Service Credentials

Administrative Services
Clinical-Rehabilitative Services (Department of Communicative Disorders)
Health – School Nurse (School of Nursing)
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)
School Social Work (School of Social Work)

Certificate Programs

Bilingual (Spanish) Special Education, Cross-Cultural Language and Academic Development (CLAD), Developing Gifted Potential, Early Childhood Special Education, Instructional Software Design, Instructional Technology, Rehabilitation Administration, Resource Spe-

cialist, Supported Employment and Transition Specialist, Teaching the Emotionally Disturbed/Behaviorally Disordered, Workforce Education and Lifelong Learning.

Research Centers and Institutes

Center for Counseling and School Psychology

Valerie Cook-Morales, Director

The Center for Counseling and School Psychology is a unit within the College of Education designed to provide support for activities such as (1) securing and administering grants and other support for research and development in counseling and school psychology, (2) encouraging cooperation with faculty members from other relevant disciplines such as anthropology, economics, psychology, social work, sociology, and Counseling and Psychological Services, and (3) conducting programs or rendering services designed to promote counseling and school psychology at San Diego State University. The Center is administered by the Department of Counseling and School Psychology; fiscal matters are coordinated through the San Diego State University Foundation.

Center for Economic Education

Kathleen Mikitka, Director

The Center for Economic Education is a unit within the College of Education. The Center is affiliated with Economics America, California Council on Economic Education, and the National Council on Economic Education and has the mission to provide the following services and functions: (1) in-service training for teachers at both the elementary and secondary levels; (2) curriculum development and consultation with school district personnel; (3) development and distribution of media and materials on economic education; (4) research in economic education; (5) consultation with other university faculty as requested; and (6) workshops, speakers, and materials on economic education for adult constituencies from business, labor, social, and professional organizations. The service area for the Center encompasses both San Diego and Imperial counties.

Interwork Institute

Fred R. McFarlane and Ian R. Pumpian, Co-Directors

The Institute's efforts focus on promoting the integration of all individuals including those with disabilities, into all aspects of school, work, family, and community life through maximum participation. The Institute conducts research, training, and education using a variety of strategies including distance learning technologies. Educational and research efforts involve organizations and individuals in the states, the Pacific Basin, 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's mission is supported through local, state, federal, and international organizations. The Institute's facilities are located at 5850 Hardy Avenue, Suite 112.

Center for Learning, Instruction, and Performance Technologies

Brockenbrough S. Allen, Director

The Center's faculty and staff conducts research on the design and use of technology-based systems for enhancing human learning and performance, monitors trends in advanced applications of educational technology and allied disciplines, and evaluates 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 Department of Educational Technology, and coordinates fieldwork and internship opportunities for advanced graduate students.

The Center also offers the services and capabilities of the College of Education's Educational Design Research Laboratory to clients who are interested in rapid prototyping and formative evaluation of educational products and services. A principle focus of the EDRL is the use of high technology video and computer systems to capture and analyze data about the usability and learnability of prototype products.

Center for Social Equity Technical Assistance

Ruben W. Espinosa and Alberto M. Ochoa, Co-Directors

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 Institute, and the Social Equity project. The Center functions within the Department of Policy Studies in Language and Cross-Cultural Education at San Diego State University.

Center for the Study of International Education

Patrick J. Harrison, Director

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.

College of Engineering

Administration

Dean: Pieter A. Frick
Associate Dean:
Assistant Dean for Student Affairs: Nicholas Panos
Assistant Dean for Research and Graduate Programs and
Director of Doctoral Program: John G. Pinto
Development Officer: Pamela Becker

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 and Engineering Mechanics, Civil 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 the four specific major fields of engineering. At the graduate level, the College offers the Master of Science degree in these same fields, and offers a doctoral degree in Engineering Sciences/Applied Mechanics with the University of California, San Diego.

The objective of the engineering program at San Diego State is to provide the intellectual and physical environment best calculated to encourage students to develop their capacities toward a successful career in the profession of engineering, knowing the need for engineers to maintain a professional proficiency in a rapidly changing technology and advancing state of the art. Moreover, the effective development and application of technology depends on responsible judgments by professionals cognizant of the total needs of society and how technology affects people. Thus, the engineering graduate should have the academic background necessary for personal and professional growth. These goals determine the content of the undergraduate engineering program.

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 sociohumanistic facets of our civilization, because the 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 utilize this knowledge of fundamentals in developing special knowledge in their areas of specific interest.

Accreditation and Academic Association

The College of Engineering is a member of the American Society for Engineering Education, and all undergraduate engineering programs are accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

Registration of Engineers

Registration of engineers is required for many fields of practice. The engineering graduate cannot acquire registration as an engineer immediately upon graduation; however, early application for the required state examination is advisable. Graduation from an accredited program such as San Diego State's 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 Program

Engineering Sciences/Applied Mechanics

Master's Degrees

Aerospace Engineering (M.S.), Civil Engineering (M.S.), Electrical Engineering (M.S.), Mechanical Engineering (M.S.).

Bachelor's Degrees

Aerospace Engineering (B.S.), Civil Engineering (B.S.), Computer Engineering (B.S.), Electrical Engineering (B.S.), Mechanical Engineering (B.S.).

Minor

Engineering

Certificate Program

Rehabilitation Technology

Research Centers and Institutes

California Institute of Transportation Safety Sheila Sarkar, Director

As the first of its kind in the state, California Institute of Transportation Safety (CITS) was created to conduct research, administer programs, and teach courses in transportation safety. Several renowned researchers and practitioners in engineering, public health, and psychology are affiliated with the Institute, uniquely providing the best possible academic and research environment. Hands-on experience is provided for students interested in transportation safety. Current programs include California Network of Employers for Traffic Safety, Southern California Local Traffic Safety Program, and Aggressive Driving and Road Rage behavior modification program.

Communications Systems and Signal Processing Institute fredric j. harris, Acting Director

This Institute supports educational and research activities in communication systems with an emphasis on radio frequency and digital signal processing aspects. Faculty, students, and industrial partners participate in developing cores of expertise in specific related areas meaningful to the technical community such as R-F circuitry, modems, receivers, transmitters, synthesizers, A-D and D-A converters, digital signal processing algorithms and hardware, antennae, and networks. Specific activities include tutorials, product development, and other research and development activities.

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.

Energy Engineering Institute Halil M. Güven, 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.

Facility for Applied Manufacturing Enterprise (FAME) James S. Burns, Director

The centerpiece of San Diego State University's manufacturing endeavors is the Facility for Applied Manufacturing Enterprise. FAME was planned as an interdisciplinary center-of-excellence dedicated to science and technology in the area of manufacturing. Its mission is to provide students with a complete and immersive product development environment in which to augment their job experiences with next-century tools and strategies. This facility evolved from the Computer Integrated Manufacturing (CIM) center founded in 1988. Since then, it has grown considerably in physical size and scope. FAME resources include 3000 square feet of dedicated floor space in the Engineering and Engineering Laboratory Buildings and another 2000 square feet for student projects. Manufacturing-related equipment includes plastic injection, compression, extrusion, pultrusion, resin transfer molding and vacuum forming equipment, a composite repair station, ultrasonic scanning equipment, platen presses, mechanical testing machines, ovens, CNC lathe and mill, automated parts bin, and four multi-axis robots. A 3" diameter by 15" long, high-pressure and temperature autoclave facility is currently under construction.

College of Health and Human Services

Administration

Dean: Dolores A. Wozniak
Associate Dean: Olita D. Harris
Assistant Dean for Student Affairs: Kenneth M. Golden
Assistant Dean for International Affairs: Tarek Shuman
Director of Development: Kathy Drucquer Duff

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 schools, and departments: Department of Communicative Disorders, School of Nursing, School of Social Work, the Gerontology program, 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 that develop their expertise to gather information, plan, and evaluate professional actions. This commitment to students produces alumni who will continue to work effectively with our professional schools and departments to preserve and promote the well-being of individuals, groups, and communities.

Bachelor of Arts, Bachelor of Science, Master of Arts, Master of Science, Master of Public Health, Master of Social Work, and Ph.D. in Language and Communicative Disorders and Public Health degrees are conferred. In addition, students may receive national accreditation, 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

Language and Communicative Disorders
Public Health

Master's Degrees

Communicative Disorders (M.A.), Nursing (M.S.),
Public Health (M.S., M.P.H., M.P.H./M.S.W.), Social Work (M.S.W.,
M.S.W./M.P.H., M.S.W./J.D.; jointly with California Western School of
Law).

Bachelor's Degrees

Health Science (B.S.), Nursing (B.S.), Social Work (B.A.),
Communicative Disorders (B.A.), Gerontology (B.A.).

Minors

Communicative Disorders, Gerontology,
Health Science, Social Work.

Certificate Programs

Early Intervention, Gerontology, Human Services Paraprofessional, Preventive Medicine Residency, Professional Services Multicultural/Bicultural.

Credential Programs

Child Welfare and Attendance Services, Clinical-Rehabilitative Services, Health Services Credential (School Nursing), Pupil Personnel Services Credential (School Social Work), and Special Education Specialist for the Deaf and Hard of Hearing.

Research Centers and Institutes

University Center on Aging

E. Percil Stanford, Director

The University Center on Aging offers the B.A. in Gerontology. The Center is active in the area of aging, involved with such activities as 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 is also responsible for the coordination of a certificate program in conjunction with the College of Extended Studies and administers an undergraduate minor in Gerontology. The Center serves as a central point for the development and dissemination of data related to diversity and aging and long-term care.

Center for Behavioral and Community Health Studies

John P. Elder, Director

Alan J. Litrownik, Gregory Talavera, Joni Mayer,
and Terry Conway, Senior Faculty Investigators

The Center for Behavioral and Community Health Studies is housed at 9245 Skypark Court, Suite 221, San Diego, CA 92113. The Center, 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. Administratively, the Center has three co-directors who report to the deans of the College of Sciences and the College of Health and Human Services. The interdisciplinary center encourages participation from all of the University colleges and departments. Currently, active investigators come from the Departments of Physical Education, Psychology, and the Graduate School of Public Health. Current Center projects involve collaboration between scientists and physicians 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 Center comes from federal and private foundation grants including several National Institutes of Health agencies. Current sponsors include the American Heart Association, Department of Defense, 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 Center provides important research experience to students who intend to pursue related careers and offers opportunities for project staff and graduate students to participate in community interventions.

**Communications Clinic for Speech, Language,
and Hearing Disorders**
**Kathee Christensen, Charlotte Lopes,
Diane Williams, Directors**

Administered by the Department of Communicative Disorders, the Clinic provides assessment and remediation services for SDSU students, staff, faculty, and the community. Comprehensive diagnostic and treatment programs are available for children and adults in the areas of delayed speech/language development, voice, fluency or articulation disorders, aphasia, cleft palate, cerebral palsy, loss of communication function, hearing loss and deafness. Also provided are services for bilingual/multicultural clients and speakers of English as a second language. Audiologic services provided by the Clinic include hearing assessment, hearing aid evaluation and selection, assistive listening device evaluations, earmolds, ear protectors, hearing conservation and speech reading/aural rehabilitation therapy. In addition, the Clinic offers opportunities for research, consultation, supervised field internships, continuing education, and other service activities. The clinic is located at 6330 Alvarado Court, Suite 100, San Diego, CA 92120-4917, (619) 594-6477.

**Interdisciplinary Center for Health and Human
Services**
Charlotte Lopes, Clinical Director

Administered by the Department of Communicative Disorders, the Center is a multidisciplinary training, research, and service facility which promotes educational and research opportunities for SDSU faculty and students in health and human services fields. The Center's *Interdisciplinary Assessment Program* teaches students the skills of interdisciplinary collaboration as they assess the behavioral, cognitive, communicative, and educational problems experienced by clients ages birth to three years. The *Assistive Device Assessment Program* provides language, cognitive, and technical assessments related to augmentative/assistive devices and systems for individuals who have communication disabilities.

**International Institute for Human Resources
Development in Health and Human Services**
Tarek Shuman, Director

Administered through the Office of the Dean of the College of Health and Human Services, the purpose of this International Institute is to respond to the urgent global need for human resources development, particularly in the fields of health and human services. Specific activities include the development of education and training programs; promoting relevant research and model demonstration programs and projects; encouraging technical cooperation with developing countries; promoting exchange of information and experience at the international level; and engaging in the convening of conferences. The Institute also provides a comprehensive, centralized source of data and information on human resource development, linking it to internationally recognized networks, and serving as a repository and a clearinghouse for information in this field.

Center for Injury Prevention and Research

Administered through the College of Health and Human Services, the purpose of the Center is to prevent intentional and unintentional injury among all segments of the community and in all age ranges, from birth to old age. The Center accomplishes this purpose by: 1) Coordinating a multidisciplinary group of professionals dedicated to injury control and prevention including traffic safety; 2) Assisting in the coordination of existing local and state resources for injury intervention and prevention; 3) Conducting ongoing injury data surveillance; 4) Supporting appropriate injury related intervention and prevention strategies aimed at individual and community change; 5) Stimulating injury intervention and prevention based research and program development; 6) Disseminating the results of injury intervention and prevention research activity generated by the Center; and 7) Providing technical assistance, training, and continuing education to appropriate target

audiences in California and outside of California, as requested. Specifically, the Center will identify injury problems and gain extensive community information which will be used to develop strategic plans to control and prevent injuries. In addition, the Center will define the changes required to reach desired solutions. A systems approach will be used to address these issues as such an approach also recognizes the comprehensive nature of injury problems and the need to develop equally comprehensive solution sets.

SDSU Institute for Nursing Research
Martha J. Shively, Director

Administered through the School of Nursing, the purpose of the Institute is to promote collaboration in the conduct, dissemination, and utilization of nursing research which will contribute to the quality of patient care and service. The Institute provides a forum for research interests and activities, and also fosters collaborative research efforts among Institute nurse clinicians and SDSU Nursing faculty. This includes identifying research priorities for individual and multi-site research projects, and providing consultation for design, method, analysis, computer services, instrumentation, and manuscript preparation. The Institute also facilitates grant application and administration for funded research, as well as the dissemination of research findings.

Institute for Public Health
Winnie Willis, 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 University-based public health expertise, research and information in the areas of biostatistics, environmental health, epidemiology, health services administration, health promotion, industrial hygiene, maternal and child health, occupational health, and toxicology. Specific activities include collaborative research, technical assistance, 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. The Institute offices are located at 6505 Alvarado Road, Suite 115, (619) 594-2632.

Social Policy Institute
Anita S. Harbert, Coordinator

Administered through the School of Social Work, the mission of this Institute is to assist local and state, public and private sector leaders in the development of policies and programs that better meet the needs of the people of San Diego County and the State of California. This is fulfilled by examining health and human service issues and problems through conducting research and evaluations; reviewing existing studies and reports at the local, state, and national levels; and preparing recommendations for dissemination to elected officials, special commissions, task forces, business executives, community leaders, and administrators of major institutions. Results, findings, and information are communicated through published professional monographs and journal articles, professional meetings and conferences, op-ed newspaper essays, testimony to political bodies, such as the County Board of Supervisors and State Legislators, a computer web site, news conferences, and interviews with electronic media representatives. Scholars from several departments within the University individually and in collaboration lend their expertise to the analysis of regional health and human services problems. Issues of focus include children, youth, and family concerns, aging and the elderly, mental health, health care delivery, welfare reform, family violence, immigration, community economic development, diversity and discrimination, and homelessness.

Center on Substance Abuse

Anita S. Harbert, Director

Annette R. Smith, Coordinator

Administered through the School of Social Work, the Center was established in 1985 with a primary mission of facilitating the development of knowledge and skills for the prevention and treatment of alcohol and other drug problems. Goals include developing and supporting projects in substance abuse research, curriculum, and community service. The Center serves as an administrative umbrella for several projects, including Student to Student, providing campus-wide substance abuse prevention, the SPAN certificate program in Human Services for persons recovering from chemical dependency and related problems, and the Central District Driving Under the Influence Program, providing education and counseling for court-ordered offenders

in the central judicial district of San Diego County. Other projects have included the College Life Alcohol Prevention Project, providing awareness of issues related to family alcoholism, the Child Welfare Substance Abuse Training Project, the Neighborhood House Head Start Substance Abuse Training Project, and the production of a substance abuse training video for child welfare workers. In addition, the Center has been involved in the training of several hundred community professionals in substance abuse intervention, and participates in the San Diego Intercollegiate Consortium for Alcohol and Drug Abuse Prevention and on the professional development committee of the California Addiction Training and Resource Center at UCSD. The Center office is located at 9245 Sky Park Court, Suite 101, (619) 467-6828. The Student-to-Student office is located on-campus, (619) 594-5803. The DUIP and the SPAN program are also at Sky Park Court. DUIP (619) 467-6810. SPAN (619) 715-0860.

College of Professional Studies and Fine Arts

Administration

Dean: Joyce M. Gattas
Associate Dean: Hayes L. Anderson
Assistant Dean for Student Affairs: Carole A. Robasciotti
Assistant Dean for Development: James Brozo

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 11 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 cultural, educational, social, economic, and technical fields.

Bachelor's degrees, and master's degrees in most disciplines, are awarded in art, design and art history, communication, child and family development, journalism, television, film, and new media production, music and dance, physical education and foods and nutrition, public administration and urban studies, recreation, parks and tourism, and theatre arts. The College also houses three ROTC programs which lead to commissioned officer status upon graduation. The International Center for Communications, the Institute of Public and Urban Affairs, the Production Center for Documentary and Drama, the Institute for International Security and Conflict Resolution, and the Institute for Leisure Behavior are the research centers that offer the campus and San Diego communities unique instructional opportunities and research.

The College of Professional Studies and Fine Arts is at the forefront of meeting and integrating the needs of community, corporate, government and educational goals. The College is uniquely positioned because of its dedication to and appreciation of traditional and non-traditional forms of scholarship and research reflecting a demographically changing society through its curriculum, research and outreach activities. Interdisciplinary collaboration is the hallmark of the College's academic programs, research and creative activity that enrich the quality of life, provoke the status quo, enhance understanding of cultural diversity and are at the cutting edge of technology.

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.), Child Development (M.S.), City Planning (M.C.P.), Communication (M.A.), Criminal Justice and Criminology (M.S.; jointly with the College of Arts and Letters), Exercise Physiology (M.S.), Music (M.A., M.M.), Nutritional Sciences (M.S.), Physical Education (M.A.), Public Administration (M.P.A.), Television, Film, and New Media Production (M.A.), Theatre Arts (M.A., M.F.A.).

Bachelor's Degrees

Art (B.A.), Child Development (B.S.), Communication (B.A.), Criminal Justice Administration (B.S.), Dance (B.A.), Foods and Nutrition (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.), Kinesiology (B.S.), 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.), Urban Studies (B.A.).

Minors

Advertising, Aerospace Studies, Art, Art History, Child Development, Communication, Dance, Journalism, Media Management, Military Science, Music, Naval Science, Physical Education, Public Administration, Public Relations, Recreation, Television, Film, and New Media, Theatre Arts.

Military Curricula

Aerospace Studies, Military Science, Naval Science

Certificate Program

Family Life Education

Research Centers and Institutes

Institute for Built Environment and Comparative Urban Research (BECUR)

Lawrence A. Herzog, Director

The main purpose of the Institute for Built Environment and Comparative Urban Research (BECUR) is to: (1) study the impact of culture on the design and shape of the urban built environment; and (2) understand how cities in different cultural settings are being transformed by global processes. BECUR provides a forum for research and dialogue among SDSU faculty and students on the cross-cultural nature of urban space and urban place. The Institute is administered by the College of Arts and Letters, and the College of Professional Studies and Fine Arts. Among its activities, the Institute promotes public lectures and conferences, research projects, and networking among urbanists, social science, planning, design and architectural scholars both in the region, as well as in other parts of the world. The Institute is located in Professional Studies and Fine Arts 177; (619) 594-6964.

International Center for Communications

John M. Eger, Director

The International Center for Communications draws upon the resources of the University, the community and the communications industry to provide the nation's first international focal point in the Pacific in which academic study, innovative research and practical experience among the private and public sectors are joined to help solve critical issues confronting the Pacific region. The Center serves two main purposes: 1) to initiate dialogues leading to new understanding among the diverse cultural and community interests of the region; and 2) to link communications and community in the new relationships essential to fulfilling the promise of the Pacific world.

The goals of the International Center are to establish an institutional approach to learning, problem-solving and practical work focusing on the critical issues of communication and information; to create a new and dynamic partnership in San Diego between business and industry, government and academia, redefining and building a sense of community; and to develop a forum and agenda for research, discussion and collaboration with other organizations in the Pacific leading toward the establishment of a permanent "Pacific Dialogue on the Media." In 1995 a Japan-U.S. Telecommunications Research Institute was founded within ICC to facilitate and foster improved understanding of new technologies affecting the Pacific Rim community.

The Institute will provide a forum for U.S. and Japan telecommunications industries – computer, communications, entertainment, broadcasting, cable and other information industries – to share common interest and concerns about trends in technology and public policy; and where possible, cooperate on developing an agenda leading to the creation of new communication infrastructures – particularly in the development of so-called “smart communities” – both in Japan and in the U.S., and importantly throughout the Pacific.

In 1996, the International Center for Communications launched a separately-funded California Institute for SmartCommunities™ to continue the work it initiated in the early '90s for Mayor Susan Golding's “City of the Future” Commission, and other communities throughout the State.

Institute for International Security and Conflict Resolution

Alan R. Sweedler and Dipak Gupta, Co-Directors

The SDSU Institute for International Security and Conflict Resolution (IISCOR) encourages and facilitates teaching and research in the multidisciplinary area of international security and conflict resolution. Specifically, topics such as superpower confrontation, nuclear armaments, international conflict, sociopolitical violence, and global environmental issues as they relate to security are covered.

The Institute is a joint effort of the Colleges of Professional Studies and Fine Arts, Arts and Letters, and Sciences. IISCOR is administered by two co-directors, advised by an executive committee consisting of faculty members representing the different disciplines that provide input into the study of international security and conflict resolution.

The Institute promotes teaching and research by organizing public forums, faculty and student seminars, developing appropriate curricula for undergraduate and graduate instruction and facilitating research and scholarly activities. SDSU offers, through IISCOR, a multidisciplinary Bachelor of Arts degree in International Security and Conflict Resolution. Students and faculty can obtain more information by calling the IISCOR office at (619) 594-6240.

Institute for Leisure Behavior

Gene G. Lamke, Director

The Institute for Leisure Behavior is the research and community service unit within the Department of Recreation, Parks and Tourism at San Diego State University. It is primarily concerned with conducting leisure related research, promoting professional development, disseminating specialized publications, and organizing conferences, seminars, lectures and workshops.

The Institute is governed by a Board of Directors which, in turn, is advised by a group of thirteen individuals from park and recreation and related fields. The Advisory Council has been instrumental in providing valuable information to the Board concerning the needs and direction of the leisure services field.

The Institute administers a variety of service programs within San Diego County. Camp Able at Coronado, an aquatic-based camp for disabled children and adults, operates ten weeks during the summer at Silver Strand State Beach. The Spring Valley Park and Recreation District within the San Miguel County service area (San Diego County) contracts for recreation services from the Institute for all its residents. Additionally, the Institute conducts research for local tourism, park and recreation entities as well as the California Department of Parks and Recreation and the United States Forest Service.

The Institute publishes monographs focusing on important issues relative to leisure services delivery. These are available to the public, as well as park and recreation practitioners. Research projects under the direction of the Institute focus on local, state, national, and international problems related to leisure and park/recreation/tourism services.

Production Center for Documentary and Drama

Jack Ofield, Director

The Production Center for Documentary and Drama sponsors and creates professional films and television programs and series and symposia with high artistic and technical standards, documentary accuracy, and creative originality. Within the School of Communication, Production Center projects are integral to the training of senior and graduate students in the telecommunications and film disciplines who work in tandem with industry professionals to gain practical experience in location and studio production. Located in PSFA 325, the Production Center mentors graduate students in the creation of projects that are an expression of their artistic and technical growth. The Center serves local, national and international non-profit entities, such as museums, libraries, performing and visual arts groups, and public service, research, philanthropic and government agencies in the development of audio-visual programs and assists other SDSU departments in documenting important projects. Production Center projects are distributed world-wide, funded from grants and contracts with industry, government, philanthropy, education and business, and administered by the SDSU Foundation.

Institute of Public and Urban Affairs

Louis M. Rea, Director

The Institute of Public and Urban Affairs is located in the School of Public Administration and Urban Studies. 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.

Dr. Sanford I. Berman Institute for Effective Communication and General Semantics

The Dr. Sanford I. Berman Institute for Effective Communication and General Semantics within the School of Communication is dedicated to the study of language and behavior in social context. Contemporary trends no longer seem to answer to the call of the individual's command of language in everyday experience. It is therefore imperative that the connections between communication and the practical realms of polity, family, and society be re-established. To do so requires scholarly attention to and an understanding of the relations among our symbolic activities, society, and the mind. The Dr. Sanford I. Berman Institute serves in this vanguard role. The Institute measures its stature by the success of those it trains to lead a more enriching existence through communication.

Center for the Visual and Performing Arts

The SDSU Center for the Visual and Performing Arts serves as a focal point for the arts on campus and in the San Diego region. The Center's primary activities involve enhancing, coordinating, and publicizing the College's visual and performing arts programs, forming alliances and partnerships with San Diego arts agencies, and initiating new programs to expand the impact of the arts on the campus and in the community.

The Center promotes the integration of the arts on campus through curriculum initiatives by designing collaborative courses that integrate the arts into other discipline areas. Through its “Masters of the Living Arts Program,” the Center invites to SDSU internationally known artists to perform and exhibit, conduct master classes, workshops and lectures for students, faculty, and the San Diego arts community. The Center promotes the arts throughout the community by initiating outreach programs from the campus in the visual and performing arts. The Center also serves the campus and the San Diego artistic community by exploring important issues and themes relative to the arts through educational opportunities, public forums, research, and multidisciplinary and multicultural exhibits and performances.

College of Sciences

Administration

Interim Dean: Stephen B.W. Roeder
Associate Dean: Rebecca B. Bryson
Associate Dean: Paul J. Paolini, Jr.
Assistant Dean for Student Affairs: Catherine J. Atkins-Kaplan
Assistant Dean for Underrepresented
Student Programs: Lawrence J. Alfred
Assistant Dean for Faculty Development: Robert S. Pozos
Director of Development:

General Information

The College of Sciences, composed of seven 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 three separate 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, Chemistry, Clinical Psychology, Ecology,
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.), Mathematics (M.A.), Microbiology (M.S.), Physics (M.A., M.S.), Psychology (M.A., M.S.), Radiological Health Physics (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.), Geological Sciences (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.S.), 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, Mathematics, Oceanography, Physics, Psychology, Statistics.

Certificate Programs

Geographic Information Science, Introductory Mathematics, Recombinant DNA Technology, Single Subject Mathematics.

Other Curricula

Allied Health, Pre dental, Premedical, Prephysician Assistant, Preveterinary.

Research Centers and Institutes

The Edwin C. Allison Center for the Study of Paleontological and Geological Sciences

The Allison Center has supported research in paleontology, geology and related sciences since 1972. The Center maintains a research library containing journals, reprints, textbooks, maps, and copies of master's theses and senior theses completed in the Geological Sciences. The library is open to faculty and students. In addition, the Center houses a collection of fossil and recent vertebrates, invertebrates, and plants. Research space is available for students, faculty, and visiting scholars. Small grants, other funds, and equipment are available to students and faculty for research projects. The Center also publishes reports of various types containing geological information related to the southern California and northern Baja regions.

Center for Behavioral and Community Health Studies

John P. Elder, Director

Alan J. Litrownik, Gregory Talavera, Joni Mayer, and
Terry Conway, Senior Faculty Investigators

The Center for Behavioral and Community Health Studies is housed at 9245 Skypark Court, Suite 231, San Diego, CA 92113. The Center, 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. Administratively, the Center has three co-directors who report to the deans of the College of Sciences and the College of Health and Human Services. The interdisciplinary center 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 Center projects involve collaboration between scientists and physicians 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 Center comes from federal and private foundation grants including several National Institutes of Health agencies. Current sponsors include the American Heart Association, Department of Defense, 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 Center provides important research experience to students who intend to pursue related careers and offers opportunities for project staff and graduate students to participate in community interventions.

Biological Field Stations

Mark D. Reynolds, Director

S. Sedra Shapiro, Associate Director

The College of Sciences manages three natural reserves that are available for research and educational activities in biology, ecology, soil science, hydrology, geology, geography, and other field sciences.

The Santa Margarita Ecological Reserve, about 4200 acres in area, is located on the San Diego-Riverside County line near Temecula, and includes the spectacular gorge of the Santa Margarita River. The Philip C. Miller Field Station, located on the north rim of the gorge, has laboratory and dormitory facilities, a weather station, and experimental eucalyptus plantings. The site lies in rugged hills and is a mosaic of riparian vegetation, oak woodlands, grasslands, coastal sage scrub,

chamise chaparral, and mixed chaparral. Elevations range from 500 to 2300 feet. Abundant wildlife typical of chaparral and woodland areas is found on the reserve, including mule deer and mountain lions. The Santa Margarita River, a perennial stream, offers opportunities for study of stream and riparian systems.

The Sky Oaks Biological Research Station (4400 acres) at about 4000 feet elevation, is located near Warner Springs in northern San Diego County adjacent to the Anza-Borrego Desert State Park and the Cleveland National Forest. A diversity of community types is found on the station including several types of chaparral, extensive oak woodlands, grasslands, riparian communities, and pine forest. This station has been the site of several research projects on the effect of fire on natural vegetation, and stands of chaparral of a variety of post-fire ages are available for study. Currently, several major projects studying aspects of global climate change are underway. Dormitory and basic laboratory facilities are available on this site.

The Fortuna Mountain Ecological Reserve consists of 500 acres within the city of San Diego a few miles from the campus within Mission Trails Regional Park. The reserve is covered by a mosaic of chaparral, coastal sage scrub, and grassland, and is adjacent to riparian areas along the San Diego River.

Persons interested in conducting research at one of the ecological reserves or using them for instructional purposes should contact the director through the campus Biological Field Stations Office at 594-2896 or inquire at the Biology Department, (619) 594-5504.

Coastal and Marine Institute

Clive E. Dorman and Susan L. Williams, Co-Directors

The Coastal and Marine Institute provides a focus for oceanography and marine studies at SDSU. The Institute assists departments within the University in the development of instructional, research, and public service aspects of coastal and ocean-oriented programs and provides special supporting services including advising students, assistance to faculty and students in research, preparation of manuscripts, operation of the SDSU Marine Laboratories and boats at Mission Bay, and liaison with other institutions and the community. The Institute is operated as a special unit of the College of Sciences and is administered by a director and an advisory council committee consisting of faculty members elected from participating departments. Additional information about marine studies is available from the Coastal and Marine Institute office or from the office of the Dean of the College of Sciences.

Center for Computer Simulation

William A. Root, Director

The Center for Computer Simulation pursues research opportunities involving the creation of complex simulations, particularly those addressing challenges in the public sector. The diversity of fields in which computer simulation now plays a role allows the Center to provide research opportunities for undergraduate and graduate students in a wide variety of academic majors.

The Center supports an extensive collection of simulation software under site license, and maintains cooperative relationship with prominent public and private sector simulation software developers to ensure that the Center's capabilities keep pace with the state-of-the-art.

Currently the Center includes members from the faculties of Applied Mathematics, Computer Science, Engineering, and Statistics. The Center is administered by a director appointed by the Dean of the College of Sciences, and resides in facilities provided by the Department of Mathematical and Computer Sciences. For information, call the Center for Computer Simulation office at (619) 594-7238.

Center for Energy Studies

Alan R. Sweedler, Director

The San Diego State University Center for Energy Studies (CES) facilitates, promotes and supports research and academic programs relating to energy, with particular emphasis on energy matters of concern to the San Diego and local southwest 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 Center 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. For more information call the Center at (619) 594-6240 or (619) 594-6155. The Center 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.

Center for Inland Waters

Stuart H. Hurlbert, Director

The Center for Inland Waters is an interdisciplinary academic unit consisting of faculty members from four SDSU colleges (Arts and Letters, Engineering, Health and Human Services, Sciences). Its purpose is to foster basic and applied collaborative research among SDSU scientists and scholars on inland water resources and ecosystems, the application of their expertise to the solution of water-related problems in southern California and adjoining regions, and the coordination and development of courses, curricula, and physical facilities for water-related instruction and research. Inland water resources include the water supply for domestic, agricultural and industrial uses, the growing system of aqueducts, reservoirs, and aquifers in which this supply is transported and stored, and the rivers, lakes, and wetlands important as habitat for wildlife, as maintainers of environmental health, and as recreation areas. Of special interest to the Center are social, economic, hydrological, public health, and ecological issues concerning the Colorado River and its delta, the Salton Sea, and the new Tijuana and Santa Margarita Rivers and their watersheds. The Center is operated as a special unit of the College of Sciences and is administered by a Director and an elected Executive Committee. Information on the Center and regional water resources is available on-line at <http://www.sci.sdsu.edu/salton/>.

Center for Innovation in Computer Science Education

William A. Root, Director

The Center for Innovation in Computer Science Education serves the University by promoting the integration of computer science education at SDSU into the business, social and educational fabric of the San Diego community at large. The Center's mission focuses on three complementary and interdependent areas: industry partnerships, university curriculum innovation, and community outreach.

The Center works to broaden and intensify the relationship between SDSU and local industry in the computer science area, by promoting and administering significantly expanded formal internship programs, faculty consulting in industry, and participation of local industry professionals in team-teaching advanced-technology computer courses at SDSU.

The Center aims to foster innovation in SDSU's computer science curriculum by undertaking research in computer science pedagogy and by establishing and administering cooperative programs linking SDSU with national publishers of computer science textbooks and other educational materials. In support of SDSU's new Transborder University initiative, the Center promotes and administers cooperative computer science distance learning programs with universities throughout Mexico, and actively seeks contracts with computer science courseware developers to adapt their materials to the Latin American market.

Finally, the Center seeks to improve the number and quality of SDSU's incoming computer science students by actively promoting and administering cooperative programs linking SDSU, private sector technology firms, and San Diego area K-12 schools. The goal of these programs is to ensure that promising students in local schools are exposed early to the excitement of computer science, and are well prepared to make a seamless transition from secondary school to a challenging first-year university computer science curriculum.

The Center is comprised of an interdisciplinary group of faculty who have interest and technical expertise in computer science, and, particularly, in computer science education. Currently, the Center includes members from the faculties of computer science, mathematics, and physics.

Institute for International Security and Conflict Resolution

Alan R. Sweedler and Dipak Gupta, Co-Directors

The SDSU Institute for International Security and Conflict Resolution (IISCOR) encourages and facilitates teaching and research in the multidisciplinary area of international security and conflict resolution. Specifically, topics such as nuclear armaments, international and intranational conflict, sociopolitical violence, and global environmental issues as they relate to security are covered.

The Institute is a joint effort of the Colleges of Sciences, Arts and Letters, and Professional Studies and Fine Arts. IISCOR is administered by two co-directors, advised by an executive committee consisting of faculty members representing the different disciplines that provide input into the study of international security and conflict resolution.

The Institute promotes teaching and research by organizing public forums, faculty and student seminars, developing appropriate curricula for undergraduate and graduate instruction and facilitating research and scholarly activities. SDSU offers, through IISCOR, a multidisciplinary Bachelor of Arts degree in International Security and Conflict Resolution. Students and faculty can obtain more information by calling the IISCOR office at (619) 594-6240.

Center for Research in Mathematics and Science Education

Judith T. Sowder, 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, Mathematical Sciences, Physics, Psychology, and Teacher Education. It is administered by a director appointed by the dean of the College of Sciences and an associate director appointed by the dean of the College of Education. 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 also supports the Doctoral Program in Mathematics and Science Education that is offered jointly by SDSU and the University of California, San Diego. The Center is located at 6475 Alvarado Road, Suite 206, San Diego, CA 92120-5006; telephone (619) 594-5090; campus mail code 1862.

Microchemical Core Facility

Long T. Wen, Director

The Microchemical Core Facility (MCF) is a component of the California State University Program for Education and Research in Biotechnology (CSUPERB). The MCF is a full-service, state-of-the-art facility that provides DNA synthesis, sequencing, and purification services for cell and molecular biologists associated with any of the 22 CSU campuses. In addition, the MCF provides for CSU faculty access

to the most recent advances in computer-assisted analyses of molecular structure. Located in the Biology Department at SDSU, the MCF provides state-of-the-art molecular analyses and characterization to CSU scientists for the lowest possible cost, as well as fostering the training of university faculty at all levels in the most recent techniques available in the molecular life sciences. Funding for the establishment and maintenance of the SDSU MCF is derived from the National Science Foundation with matching funds provided by the State of California. Call (619) 594-1669 for more information.

Molecular Biology Institute

Greg L. Harris, Director

The Molecular Biology Institute was established to serve interested departments of the biological and physical sciences in the coordination, support and enhancement of research and instruction in the molecular biological sciences. Interests and activities of the MBI encompass all approaches which aim to explain biology at the molecular level. The MBI sponsors a weekly seminar series that facilitates faculty and student interaction with scientists from other institutions. Currently, full members of the Institute are drawn from the Departments of Biology and Chemistry, 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; telephone (619) 594-7429.

Interdisciplinary Research Center for Scientific Modeling and Computation

José E. Castillo, Director

Peter Salamon, Associate Director

The Interdisciplinary Research Center for Scientific Modeling and Computation (IRC) promotes and supports an excellent environment for scientific research at SDSU. The Center facilitates the interaction between applied mathematics and other disciplines by providing the necessary infrastructure for productive research efforts.

The Center's primary areas of research are numerical methods, modeling, and simulation. Projects combine insights from theoretical mathematics and other sciences with expertise in applied as well as computational mathematics.

The Center sponsors interdisciplinary seminars, colloquia, and workshops which draw scientists from many fields. Visiting scientists come for extended periods from industries and from other universities, attracted by the conviction that science and engineering problems benefit greatly from interdisciplinary efforts.

The Center's activities significantly enhance the ties between applied and computational mathematics at SDSU by involving faculty and students in projects closely connected to real applications. Interested students and faculty may obtain more information by calling the IRC office at (619) 594-7205.

Imperial Valley Campus

Administration

Dean: Khosrow Fatemi
Associate Dean for Academic Affairs: Alfred Merino
Assistant Dean for Student Affairs: Jeanette Shumaker
Director of Library Services: Frank Bruno
Director of Financial and Business Services: Irma Martinez
Director of Advancement: John Renison

Faculty

Emeritus: Ayala, Baldwin, Ballesteros, Erzen, Franklin, Harmon, Hill, King, Rodney, Spencer, Varela-Ibarra
Professors: Dunn, Elizondo, Medeiros, Reyes, Ryan
Associate Professors: Garrison, Neumann, Padmanabhan, Polich, Sabath, Shumaker, Stampfl
Assistant Professors: Amaral, Camara, Castañeda, Lovett
Lecturers: Fuentes, Livingston, Murphy, Razo

General Information

The Imperial Valley Campus is a two-year upper-division campus of San Diego State University serving the desert area 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 is located in the Imperial Valley on the Mexican border in the city of Calexico. Offering only the last two years of undergraduate education, as well as a fifth year credential program for teacher preparation and M.A. programs, the campus accepts transfer students from community colleges or other colleges, who have at least 56 units. As a branch campus, the Imperial Valley Campus offers students the advantages of smaller classes and individual contact with the faculty. Interactive television provides students in Calexico the opportunity to participate in some classes broadcast live from the campus in San Diego. The Imperial Valley Campus schedules its classes to meet once a week 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. Classes are also offered on the weekends.

The location on the Mexican border provides the opportunity for involvement in a bicultural environment. There are many opportunities to participate in the cultural life of Mexicali, just across the border, a city of nearly one million people. There are also many opportunities on the U.S. side of the border to be involved in a bilingual/crosscultural setting. There is an exchange program for students between the Imperial Valley Campus and the Universidad Autonoma de Baja California which allows students to take classes at either of the participating universities and receive credit at their home institution. Among the faculty are professors with Latin American emphases in history, geography, sociology, and Spanish. The faculty is also augmented with other Latin American specialists from Mexico and from the San Diego campus.

The Imperial Valley is one of the richest agricultural centers in the country. It has a desert climate with mild winters and little rainfall. Because of this, the area has a great potential for the development of alternative energy sources. Geothermal energy is already being produced in the area and solar and wind energy are both potentially important sources for future development. The desert also offers the opportunity to study a fragile ecological environment. Significant archaeological discoveries have been made in the area and there is continuing archaeological fieldwork.

Curricula Offered

Degrees

Major in criminal justice administration with the B.S. degree in applied arts and sciences.
Major in English with the B.A. degree in liberal arts and sciences.
Major in history with the B.A. degree in liberal arts and sciences.
Major in international business (Latin American emphasis), with the B.A. degree in liberal arts and sciences.
Major in Latin American studies with the B.A. degree in liberal arts and sciences.
Major in liberal studies with the B.A. degree in liberal arts and sciences.
Major in psychology with the B.A. degree in liberal arts and sciences.
Major in public administration with the B.A. degree in applied arts and sciences.
Major in social science with the B.A. degree in liberal arts and sciences.
Major in Spanish with the B.A. degree in liberal arts and sciences.
Minor in English.
Minor in history.
Minor in political science.
Minor in public administration.
Minor in small business management.
Minor in Spanish.

The Imperial Valley Campus, in cooperation with academic units and the Graduate Division on the San Diego campus, offers selected graduate programs leading to advanced degrees and credentials. Such programs, scheduled on a part-time basis for working professionals, have been offered for the Master of Arts degree in Education with a concentration in Administration and Supervision, the Master of Arts degree in Education with a concentration in Elementary Curriculum and Instruction or Secondary Curriculum and Instruction, the Master of Science degree in Counseling, Special Education Specialist credentials, the Master of Social Work, and the Master's degree in Public Administration.

Certificate Programs

Business Administration, Public Administration, Spanish Court Interpreting, Spanish Translation Studies

Teaching Credentials

Basic: Multiple Subject Cross-Cultural Language and Academic Development (CLAD) emphasis, Multiple Subject Bilingual Cross-Cultural Language and Academic Development (B/CLAD) emphasis: Spanish, Single Subject
Specialist: Administrative Services – in conjunction with the College of Education
Special Education – in conjunction with the College of Education

For further information, see the Bulletin of the Imperial Valley Campus.

Research Center

California Center for Border and Regional Economic Studies (CCBRES)

The California Center for Border and Regional Economic Studies (CCBRES) specializes in research and database development in the two areas of U.S.-Mexico trade relations and the Imperial Valley. The Center collects and compiles statistics on trade between California and Mexico and encourages research in this area. CCBRES publishes a

monthly bulletin of in-house and sponsored analyses of the issues involved in bilateral trade and hosts conferences and workshops on border issues, ranging from trade and economics to sociological and educational issues. The Center's goal is to become a national resource center for California-Mexico trade relations.

As related to the economic situation in the Imperial Valley, CCBRES is in the process of developing and maintaining a current economic profile of the Imperial Valley. The data will include economic indicators such as demographic information, quality of life, labor and agricultural statistics, and macro economic indicators.

Facilities

The campus is located on an eight-acre city block in the heart of Calexico's civic center along the Mexican border. This was originally the site of Calexico's first high school, and some of the campus buildings, including Rodney Auditorium, are part of the original school structures.

The six million dollar expansion of campus facilities has created a pleasing architectural harmony of old and new structures surrounding a spacious central lawn area, the Rollie Carrillo Quad. Adjoining the quad, the expanded library, Rodney Auditorium, and John Stepling Art Gallery provide academic and cultural resources for the entire community. New buildings include administration/student life building, faculty offices, art gallery, physical plant, a computer laboratory, and a library expansion. A dedication was held on October 12, 1995.

The library, located in the center of the campus, is designed to facilitate research and to provide a pleasant atmosphere for study. The collection is expanding and has more than 107,000 volumes, periodicals, and newspapers which support the curricula offered on the Imperial Valley Campus. Services provided include reference assistance, photocopying facilities, CD ROM databases, personal computers for word processing, full text database, Internet access and interlibrary loans. During the semester, the library is open from 10:00 a.m. until 10:00 p.m., Monday through Thursday, Friday from 10:00 a.m. until 4:00 p.m., and Saturday from 9:00 a.m. until 3:00 p.m. Located inside the library are the Learning and Career Centers.

Computer assistance is available in the computer laboratory with both Macintosh and IBM compatible systems and access to the Internet. Also available is a bookstore which carries textbooks, snacks, and other items. The Associated Students operate a Student Union with lounge and study areas.

Admission and Registration

To apply for admission to the Imperial Valley Campus, students must file a complete application and transcripts as outlined elsewhere in this catalog. Both completed application forms and transcripts should be sent to the Admissions Office, San Diego State University, Imperial Valley Campus, 720 Heber Avenue, Calexico, California 92231. Please telephone (760) 768-5509 for further information. Students register by the touchtone registration system (RegLine). Students will not be permitted to access RegLine until fees are paid. Late registration is allowed during the first two weeks of the semester. Students wishing to late register must pay registration fees plus a \$25.00 late fee.

Scholarships

Information and applications for scholarships are available from the Office of Scholarships. Following is a list of scholarships established at Imperial Valley Campus: American Association of University Women; American Business Women's Association; Bently Summer Institute; Bud Antle, Bud of California; California Correctional Peace Officers Association; Delta Kappa Gamma; Educators, SDSU-IV Campus; El Centro Rotary; Dr. Paul and Peg Erzen; Faculty/Student Mentor, SDSU-IV Campus Academic Excellence; General Dynamics; Government Agencies Federal Credit Union; HACU; Kiwanis Club of Blythe, CA; Mr. and Mrs. Bernard Lipinsky; Miller's Outpost; Niaz Mohamed; National Hispanic; Patino Family; Phi Delta Kappa; Bertha Rosas; Rotary of Holtville; Rotary International District 5340; Soroptimist International of Calexico; Spanish; Doris and Lowell Sutherland Memorial.

Endowments:

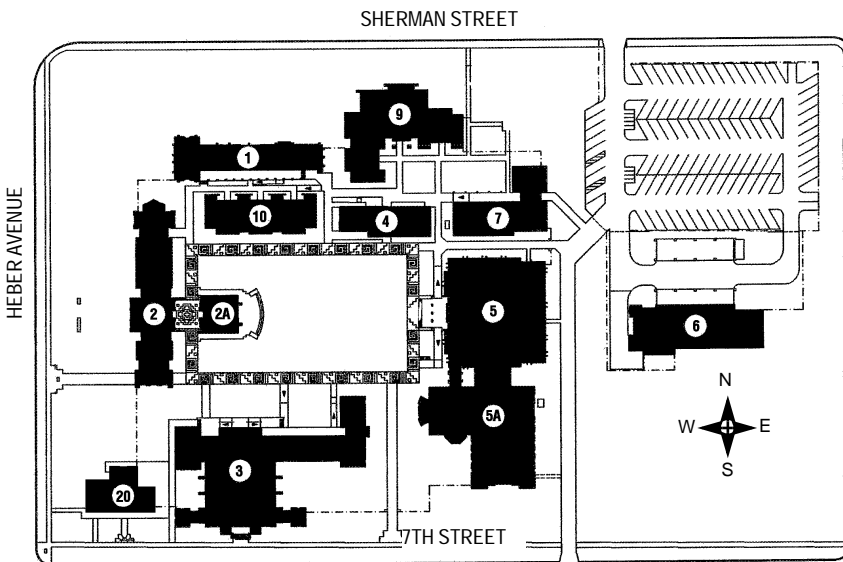
- | | |
|-------------------------|---------------------------|
| Dean's | Sally McMahon/Doves |
| Enrique (Kiki) Camarena | Jerry Pennington Memorial |
| Good Sport Howie | San Diego Gas & Electric |
| Imperial Valley Rotary | |

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.

BUILDING LEGEND

1. North Classroom Building (N-101, N-102, N-106, N-108)
2. Administration Building (Administration/Academic Affairs/ Business Office/ Student Affairs)
- 2A. Art Gallery
3. Auditorium/ Classrooms (LA-1, LA-2, LA-3, LA-4)
4. Classroom Building (C-6, C-7, C-8, C-9, C-10)
5. Library
- 5A. Library Addition
6. Physical Plant
7. Computer Building
9. Faculty Offices: Building East
10. Faculty Offices: Building West
20. Student Center



Academic Divisions and Special Programs

Division of
Undergraduate Studies

Graduate Division

Nondegree Curricula

Preprofessional Programs

Certificate Programs

Division of Undergraduate Studies

OFFICE: Administration 201

TELEPHONE: (619) 594-5841

FAX: (619) 594-7934

Objectives and Functions

The Division of Undergraduate Studies serves to provide coordination and evaluation of the undergraduate programs at San Diego State University. It has general responsibility for the undergraduate curriculum and for academic standards and regulations that affect undergraduate students.

The Division has a special concern and responsibility for academic programs of a University-wide character. It administers the Liberal Studies and Interdisciplinary Studies in Three Departments majors, the University Honors Program, Study Abroad Semesters, the CSU International Programs, the Faculty/Student Mentoring Program, and the AVID Summer Bridge program. It is the administrative home for the University Advising Center, and for the Thomas B. Day Freshman Success Programs, an Academic Affairs and Student Affairs partnership endeavor.

The Division also coordinates assessment of student preparedness in writing and mathematics at the freshman and transfer level, and the Upper Division Writing Requirement for graduation.

Innovation contributes to the vitality of the University. The Division encourages and assists faculty in the development of new perspectives, programs, and curriculum, and encourages dialogue and discussion of new approaches to teaching through an electronic listserve and journal, and awards.

On significant matters of University-wide concern, the Division of Undergraduate Studies submits proposals to the University Senate for consideration and action.

Above all, the Division of Undergraduate Studies exists to promote the quality, diversity, and richness of the undergraduate programs at San Diego State University. It does so through the active involvement of students and faculty in the programs of the Division.

Honors Program

University Honors Program

The University Honors Program provides opportunities for students with demonstrated academic ability to find the stimulation and challenge that will help them develop their potential. The program offers courses which meet the General Education requirements common to all students; it does not offer work in specific majors. Students should anticipate enrolling in at least two honors courses each year, drawing their other work from the regular offerings of the University. The program is open to students in all majors, and involves small classes, special advising in both academic requirements and career options, opportunity for independent projects, and participation in student exchanges with similar programs across the nation.

Qualified students may apply upon admission to the University by contacting the Division of Undergraduate Studies (CH-3350). Eligibility at entrance is determined by an SAT score of approximately 1150 or above (ACT 26), or a high school GPA of 3.5, including successful completion of advanced high school courses; later eligibility is determined by a superior GPA at this University and is subject to space limitations.

Departmental Honors Courses

Some departments regularly offer honors classes which are independent of the University Honors Program; for these eligibility is determined according to achievement in the particular field. Students should consult the Class Schedule for such honors classes and contact the department or instructor for information.

CSU 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 12,000 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 over 100 designated academic majors. Affiliated with more than 70 recognized universities and institutions of higher education in 16 countries, the International Programs also offers a wide selection of study locales and learning environments.

Australia. The University of Western Sydney

Canada. The universities of the Province of Quebec including: Université de Montréal, Concordia University, Université Laval, McGill University, Université du Québec system, Bishop's University, i.a.

Denmark. Denmark's International Study Program (the international education affiliate of the University of Copenhagen)

France. Institut des Etudes Francaises pour Étudiants Étrangers, Université de Droit, d'Économie et des Sciences d'Aix-Marseille (Aix-en-Provence); Mission interuniversitaire de coordination des échanges Franco-Américains, Universités de Paris III, V, VI, VIII, X, XI, XII, XIII

Germany. The institutions of higher education in the German Federal State of Baden-Württemberg, including: Universität Freiburg, Fachhochschule Furtwangen, Universität Heidelberg, Universität Hohenheim, Universität Karlsruhe, Universität Konstanz, Fachhochschule Mannheim, Fachhochschule Furtwangen, Fachhochschule Mannheim, Universität Mannheim, Fachhochschule Nürtingen, Fachhochschule Reutlingen, Berufsakademie Stuttgart, Universität Stuttgart, Musikhochschule Trossingen, Universität Tübingen, Universität Ulm

Israel. Tel Aviv University, The Hebrew University of Jerusalem

Italy. CSU Study Center (Florence), Università degli Studi di Firenze, La Accademia di Belle Arti Firenze

Japan. Waseda University (Tokyo)

Korea. Yonsei University (Seoul)

Mexico. Universidad Pedagógica Nacional (Mexico City), Instituto Tecnológico y de Estudios Superiores de Monterrey, Campus Querétaro

New Zealand. Lincoln University (Christchurch), Massey University (Palmerston North)

Spain. Universidad Complutense de Madrid, Universidad de Granada

Sweden. Uppsala Universitet

Taiwan. National Chengchi University (Taipei)

United Kingdom. Bradford University, Bristol University, Hull University, Kingston University (Greater London), Sheffield University, University of Wales, Swansea

Zimbabwe. University of Zimbabwe (Harare)

International Programs pays all tuition and administrative costs for participating California resident students to the same extent that such funds would be expended to support similar costs in California. Participants are responsible for all personal costs, such as transportation, room and board, living expenses, and home campus fees. Participants remain eligible to receive any form of financial aid (except work-study) for which they can individually qualify.

To qualify for admission to the International 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 in France, Germany, and Mexico. California Community Colleges transfer students are eligible to apply directly from their community college if they can meet these requirements. Students must also possess a current cumulative grade point average of 2.75 or 3.0, depending on the program for which they apply. Some programs also have language study and/or other coursework prerequisites.

Information and application materials may be obtained from the Division of Undergraduate Studies (CH-3350) or by writing to The

California State University International Programs, 400 Golden Shore, Suite 122, Long Beach, California 90802-4275. Visit us on the World Wide Web at www.gateway.calstate.edu/csuienet/.

International Study Courses

San Diego State University provides the opportunity for students enrolled in The California State University International Programs to receive credit for special study or for subjects taken at universities abroad. The numbers 200, 400, and 500 are used to designate lower division, upper division, and upper division also acceptable for graduate credit. Transcript designation will be **IS 200, 400, 500**.

IS 200, 400, 500. Projects in Study Abroad

(Subject to be designated by Overseas Resident Director, International Programs) (1-6) I, II

Prerequisite: Open only to students in The California State University International Programs.

Coursework taken by students studying abroad under the auspices of the CSUIP. May be repeated with different content.

Graduate Division

OFFICE: Centennial Hall 3320

TELEPHONE: (619) 594-5213

FAX: (619) 594-0189

Organization and Administration

The Graduate Division is under the jurisdiction of Graduate and Research Affairs whose administrative officer is Vice President for Research and Dean of the Graduate Division. 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. Dean of the Graduate Division serves as chair of the Graduate Council.

The Graduate Division admits all students to the University and to authorized graduate degree curricula, 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 Vice President for Research and Dean of the Graduate Division is the appropriate University authority for the administration of all matters related to 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 are designed to 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 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.

Doctor of Philosophy

The Doctor of Philosophy degree is offered in the following fields:

Biology	Engineering Sciences/Applied Mechanics
Chemistry	Geography
Clinical Psychology	Language and Communicative Disorders
Ecology	Mathematics and Science Education
Education	Public Health/Epidemiology

Doctor of Education

The Doctor of Education degree is offered with concentrations in Educational Administration and Policy, Educational Technology, and Teaching and Learning.

Master of Business Administration

Master of City Planning

Master of Music

Master of Public Administration

Master of Public Health

Master of Social Work

Master of Fine Arts

The Master of Fine Arts degree is offered in the following fields:

Art
Creative Writing
Theatre Arts

Master of Arts

The Master of Arts degree is offered in the following fields:

Anthropology	English	Philosophy
Art	French	Physical Education
Asian Studies	Geography	Physics
Biology	History	Political Science
Chemistry	Interdisciplinary Studies	Psychology
Communication	Latin American	Sociology
Communicative	Studies	Spanish
Disorders	Liberal Arts	Television, Film, and
Economics	Linguistics	New Media Production
Education	Mathematics	Theatre Arts
	Music	Women's Studies

Master of Science

The Master of Science degree is offered in the following fields:

Accountancy	Counseling	Nursing
Aerospace Engineering	Criminal Justice and	Nutritional Sciences
Applied Mathematics	Criminology	Physics
Astronomy	Electrical Engineering	Psychology
Biology	Exercise Physiology	Public Health
Business Administration	Geological Sciences	Radiological Health
Chemistry	Interdisciplinary	Physics
Child Development	Studies	Regulatory Affairs
Civil Engineering	Mechanical Engineering	Rehabilitation Counseling
Computer Science	Microbiology	Statistics
Computational Science		

Concurrent Degrees

Concurrent degrees are offered in the following fields:

Master of Business Administration and Master of Arts in Latin American Studies
Master of Public Health and Master of Social Work
Master of Social Work and Juris Doctor

Cooperative Degree Program

Master of Science degree in Geological Sciences and Doctor of Science in Earth Sciences

Admission to Graduate Study

Admission to San Diego State University for graduate study is 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 *Bulletin of the Graduate Division* 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 advice as to how to proceed. Some departments stop reviewing applications earlier than others because of the limited space.

Application Procedures

All applicants for graduate and postbaccalaureate study (e.g., advanced degree applicants, those seeking credentials or advanced certificates, and those interested in taking courses for personal or professional reasons, etc.) must file a complete application within the appropriate filing period. *Second baccalaureate degree candidates*

should apply as undergraduate degree applicants. A complete application for graduate study includes the graduate and postbaccalaureate admission application plus supplementary materials determined by individual departments. Postbaccalaureate applicants, including those who completed undergraduate degree requirements and were graduated from this University, are also required to complete and submit an application and the \$55.00 nonrefundable application fee. Since applicants for graduate programs may be limited to the choice of a single CSU campus on each application, approvals for redirection to alternative campuses or later changes of campus choice will be minimal. In the event that a graduate 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. Applications may be obtained from the departmental offices, the Graduate Division, the Office of Admissions and Records, or from any campus of The California State University. Applications are also available on the WorldWideWeb at <http://www.csumentor.edu/AdmissionApp/>.

Application materials should be sent to:

Graduate Admissions
Graduate Division
San Diego State University
San Diego, CA 92182-8020

General Admission Requirements

All applicants for any type of graduate study at San Diego State University must: (a) hold an acceptable baccalaureate degree from an institution accredited by a regional accrediting association or have completed equivalent academic preparation as determined by the Graduate Dean; (b) have attained a grade point average of at least 2.75 (when A equals 4) in the last 60 semester (90 quarter) units attempted (this calculation may not include lower division courses taken after award of a baccalaureate degree); and (c) have been in good standing at the last institution attended. Applicants who do not qualify for admission under provisions (a) and (b) may be admitted by special action if the Graduate Dean determines that there is other academic or professional evidence sufficient to warrant such action. **The Graduate Division is the only official admissions authority for graduate study at San Diego State University. See Bulletin of the Graduate Division for further details.**

Members of the faculty of San Diego State University holding appointments at or above the rank of instructor or lecturer may not be candidates for degrees at this University. Faculty may register for courses as postbaccalaureate unclassified students.

Admission Categories

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

Postbaccalaureate Standing (Unclassified)

A student wishing to enroll in courses at the University for personal or professional reasons, but not necessarily with an objective of an advanced degree, credential, or graduate certificate may be considered for admission with postbaccalaureate standing (unclassified) when the student meets the criteria specified under General Admission Requirements. Admission with postbaccalaureate standing (unclassified) does not constitute admission to, or assurance of consideration for admission to, advanced degree curricula. Students admitted in this category may not enroll in 600-, 700-, 800- and 900-numbered courses without special permission of the instructor and the graduate adviser of the department or school in which the course is offered. The number of postbaccalaureate (unclassified) students admitted is limited as part of the University's enrollment management program. Applicants for admission with postbaccalaureate standing (unclassified) should consult the Bulletin of the Graduate Division for deadline dates for submission of applications.

A student who is enrolled in the University with postbaccalaureate standing may request acceptance into an advanced degree curriculum with graduate standing (classified or conditionally classified). Applica-

tions for such continuing students are available from the Graduate Division. Reports of the GRE General test scores must be on file at the University before continuing students may apply for graduate standing (classified).

Postbaccalaureate 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) must meet 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. The applicant should consult the department involved for information concerning specific admission requirements and should submit a departmental application during the appropriate filing period. Admission with postbaccalaureate standing (classified) does not constitute admission to, or assurance of consideration for admission to, advanced degree curricula.

Graduate Standing (Classified)

A student wishing to be admitted to a program of study leading to an advanced degree must meet the criteria specified under General Admission Requirements, and, in addition, must:

- Achieve a satisfactory score on the GRE General test. (Students holding an advanced degree from an institution that is a member of the Council of Graduate Schools are exempted from this requirement; students applying to the College of Business Administration will take the Graduate Management Admission Test. See the Bulletin of the Graduate Division for other possible exemptions.)
- Have completed an undergraduate major appropriate to the field in which the prospective student desires to earn an advanced degree.
- Satisfy the special departmental or college requirements as stated in Part Three of the *Bulletin of the Graduate Division* under "Courses and Curricula."
- Meet the professional, personal, and scholastic standards for graduate study established by the department and the Graduate Council.

Students admitted with graduate standing (classified) are admitted to authorized advanced degree curricula and may enroll in courses numbered 600 and above. Such admission does not imply that a student will be advanced to candidacy for an advanced degree.

Conditional 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 Admission Requirements but who has deficiencies in the criteria for graduate standing (classified) may be granted conditional graduate standing (classified) if the deficiencies can be met by specific additional preparation, including qualifying examinations. Not more than 15 semester units may be assigned to satisfy undergraduate deficiencies in the major and all course conditions must be met within five semesters from the time of initial enrollment. If submission of acceptable scores on the GRE or GMAT is specified, that condition must be met by the end of the first term of enrollment. Students admitted with conditional graduate standing (classified) are admitted to authorized advanced degree curricula and may enroll in courses numbered 600 and above. Once the conditions established by the department, school, or college have been met, the student will be accorded full graduate standing (classified).

Bulletin of the Graduate Division

Complete details on the operation and administration of these requirements, together with other information on graduate study, will be found in the *Bulletin of the Graduate Division*, which is available at the Bookstore and also available on the World Wide Web (<http://libweb.sdsu.edu/bulletin/>).

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.

Preprofessional Health Advising Office

The preprofessional health advising office is responsible for advising premedical, pre dental, preveterinary, and allied health students in their preparation and application to the professional schools of their choice. This office works in conjunction with the candidate's major department to establish a degree program coordinated with the preprofessional requirements of the professional schools. It is the communication link between the student and the profession, keeping the student apprised of changes in the requirements and procedures for acceptance. The advising office is located in Life Sciences, Room 204, (619) 594-6638, <http://www.sci.sdsu.edu/preprof/>.

Predental Curriculum

The predental program is pursued in conjunction with a degree program. Students ordinarily elect to concentrate in biology, chemistry, microbiology, or psychology with a major in one area and selected coursework in the others. Other departmental majors are permissible, however. **Predental students should confer with the predental adviser prior to initial registration and at least once each semester regarding their progress. In addition, they should meet each semester with their departmental academic adviser to obtain approval for their program for the coming semester. Disadvantaged predental students should apply for the Health Careers Opportunity Program (HCOP) in Life Sciences, Room 204.**

Science requirements. Regardless of the major, predental students should include the following courses in their program: Biology 201, 202, 215, 350, 352, 577, 590; Chemistry 200, 201, 231, 431; Mathematics 121 and 122, or 150; Physics 180A-182A and 180B-182B, or 195, 195L, 196, 196L, 197, 197L; Psychology 101 plus one upper division course in psychology. Each student should consult the major for level of course required when there are alternatives. **Biology 250B, Topics in Dentistry, is offered each spring semester and Biology 340A and 340B, Preventive Dentistry, is offered every semester.** Three mandatory meetings occur in the spring and fall beginning in the spring two years before admission.

Recommended electives. In addition to the courses listed, students should fulfill all requirements for their major and, if possible, take Biology 366, 366L, and Chemistry 365, as recommended by their department. Biology 348, Health Professions Internship, is also recommended. Strongly recommended electives are Biology 212 and 474. The students are also expected to obtain information from the preprofessional health advising office regarding the entrance requirements of specific dental schools.

College preparation. High school students planning to enter dentistry should include in their high school program the following subjects: elementary algebra, plane geometry, intermediate algebra, chemistry, physics, two or three years of French, German or Spanish, and four years of English.

Admission. Predental students must realize that the pool of dental applicants has recently increased and the competition for admission to schools of dentistry, particularly at University of California, Los Angeles and University of California, San Francisco is great. The average overall GPA of the entering class of 1997 to UCLA was 3.58 and the science GPA was 3.55.

Admissions tests given by the American Dental Association should be taken not later than fall term one year before admission. Since the

test is now given only in computer format, candidates should obtain a pamphlet from the preprofessional health advising office providing current information on where to take the test.

The Committee Letter is preferred by most schools of dentistry. It is San Diego State University's formal endorsement of your candidacy. Most schools also require three letters of evaluation, two of which should be from science professors from whom you have taken courses. Evaluation request forms are available in the preprofessional health advising office. A publication: *Admission Requirements of the United States and Canadian Dental Schools* is available at the Campus Store or from the American Association of Dental Schools.

The preprofessional health adviser will be available to high school or transfer students by appointment in June and during the August registration period. **All predental students should establish a personal file in Life Sciences, Room 204; (619) 594-6638; <http://www.sci.sdsu.edu/preprof/>.**

Prelegal Curriculum

The prelegal program is pursued in conjunction with a degree program. There is no specific prelaw program leading to a bachelor's degree. Students interested in the legal profession should consult with the University prelaw adviser regarding the entrance requirements of the specific law school they hope to attend.

The following curriculum is designed to meet the requirements of standard American schools of law for a broad and liberal education, while at the same time providing desirable flexibility in the individual programs. There are two patterns of concentration which will usually be indicated for the prelegal student, either of which may be selected, in consultation with the adviser, to fit best the interests of the student. These are the major-minor pattern and the liberal studies major pattern. Subject to individual variation, the fields of economics, history, and political science should receive first consideration when choosing the pattern of concentration as being the most effective background for later professional study in law.

The following courses of study are recommended. Lower division: Accountancy 201 and 202, Economics 101 and 102, Political Science 101 and 102, and a year course in history. Upper division: In the junior and senior years students will plan their course with the counsel of their adviser in terms of the field of law in which they plan to work, but keeping in mind the entrance requirements and examinations for admission to schools of law. The following list should receive prime consideration by all prelegal students in the selection of courses, though it is to be thought of as flexible in accordance with student needs. Finance 340; Economics 338; History 545A-545B; Political Science 301A-301B, 346, 347A-347B. Additional: Economics 380, History 536 and 547A-547B, 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.

Premedical Curriculum

The premedical program is pursued in conjunction with a degree program. Students ordinarily elect to concentrate in biology, chemistry, or microbiology, with a major in one area and selected coursework in the others. Other departmental majors are permissible, however. **Premedical students should confer with the premedical adviser prior to initial registration and at least once each semester regarding**

their progress. In addition, they should meet with their departmental academic adviser to obtain approval for their program for the coming semester. Disadvantaged premedical students should apply for the Health Careers Opportunity Program (HCOP) in Life Sciences, Room 204.

Science requirements. Regardless of the major, premedical students should include the following courses in their program: Biology 201, 202, 215, 352, 366 and 366L, 577, and 590; Chemistry 200, 201, 231, 365 and 467L, 431; Mathematics 121 and 122, or 150; Physics 180A-182A and 180B-182B, or 195, 195L, 196, 196L, 197, 197L. Each student should consult the major for level of course required when there are alternatives. **Biology 250A, Topics in Medicine, is offered each fall semester.** An introductory course, **Biology 296, Careers in the Health Professions**, is offered in the spring. Three mandatory meetings occur in the spring and fall beginning in the spring two years before admission.

Recommended electives. In addition to the courses listed, students must fulfill all requirements for their major and, if possible, take at least one advanced course recommended by their department such as: Biology 350. Psychology 101 is a good elective. Premedical students are strongly encouraged to take Biology 348, Health Professions Internship. Students are also expected to obtain information from the preprofessional health advising office regarding the entrance requirements of specific medical schools.

College preparation. High school students planning to enter medicine should include in their high school program the following subjects: elementary algebra, plane geometry, intermediate algebra, chemistry, physics, two or three years of French, German or Spanish, and four years of English.

Admission. Most medical schools give preference to students with baccalaureate degrees in academic subjects; **premedicine is not an academic major.** Any major is acceptable to medical schools, and recent research has demonstrated that there is no bias against the nonscience major in the selection process. Nor is there any significant difference between the science and the nonscience major in medical school performance or in eventual selection of residency. The specific requirements for various majors are found in this catalog under department and program headings.

Competition for admission to California medical schools has increased markedly in the past few years. Selection for admission is based on many factors beyond the satisfactory completion of minimum requirements including undergraduate grade point average, MCAT scores, and letters of evaluation. Courses taken to satisfy the science requirements must be taken on a graded basis. The credit/no credit option should be used only sparingly in nonscience courses.

Nearly all medical schools also require applicants to take the MCAT, given early in spring and in August each year. Reservations for this examination **must** be made at least one month in advance of the scheduled date; application packets are available in the preprofessional health advising office.

The office also has a manual which describes the test and provides practice questions and suggestions for preparing for the test. Applicants are urged to take the test in the spring of the calendar year preceding the year of admission to medical school and not later than the fall term one year before anticipated admission.

The Committee Letter is preferred by most schools of medicine. It is San Diego State University's formal endorsement of your candidacy. Three to five individual letters of evaluation are also generally required by medical schools and used in the selection process. At least two letters should be from science faculty. The importance of these letters cannot be overemphasized. It is strongly recommended that premedical students secure letters from instructors immediately upon finishing courses, and that students see their adviser regularly so that the adviser can write knowledgeable recommendations when needed. Evaluation forms are available in the preprofessional health advising office.

The varying admission requirements of medical schools are listed in the publication *Medical School Admission Requirements* (available in the Campus Store). Since most students seek admission to an average of twenty medical schools, this book should be consulted during the year of application.

Osteopathic medical schools require basically the same minimum undergraduate program as allopathic schools. Most schools also request letters of evaluation from practicing osteopathic physicians.

The preprofessional health adviser will be available to high school or transfer students by appointment in June and during the August registration period. **All premedical students should establish a file in Life Sciences, Room 204, (619) 594-6638, <http://www.sci.sdsu.edu/preprof/>.**

Preveterinary Curriculum

The preveterinary program is pursued in conjunction with a degree program. Students ordinarily elect to major in biology. Other departmental majors are permissible, however. **Preveterinary students should confer with the preveterinary adviser prior to initial registration and at least once each semester regarding their progress. In addition, they should meet each semester with their departmental academic adviser to obtain approval for their program for the coming semester. Disadvantaged preveterinary students should apply for the Health Careers Opportunity Program (HCOP) in Life Sciences, Room 204.**

Science requirements. Regardless of the major, preveterinary students should include the following courses in their program: Biology 201, 202, 215, 352, 366 and 366L, 577; Chemistry 200, 201, 231, 365 and 467L, and 431; Mathematics 121 and 122, or 150; Physics 180A-182A and 180B-182B or 195, 195L; 196, 196L; three semesters of English; three semesters of humanities.

Recommended electives. In addition to the courses listed, students should fulfill all requirements for their major and, if possible, take at least one advanced course recommended by their department such as: Biology 350, 354, 590. **Biology 250C, Topics in Veterinary Medicine, is offered each fall semester.** Preveterinary students are encouraged to complete Biology 348, Health Professions Internship.

College preparation. High school students planning to enter veterinary medicine should include in their high school program the following subjects: elementary algebra, plane geometry, intermediate algebra, chemistry, physics and four years of English.

Admission. Competition for veterinary school admission continues to be great, with a 4 to 1 ratio of applicants to accepted students at University of California, Davis. All preveterinary students should consider applying to one or more out-of-state schools in addition to UC Davis as most U.S. schools now accept nonresidents. The 1997 UC Davis entering class had the following average statistics: cumulative undergraduate GPA, 3.4; required science coursework GPA, 3.4; last 45 units of undergraduate work GPA, 3.6; Graduate Record Examination general aptitude test scores—verbal 82%, quantitative 80%, analytical 88%.

Admission criteria at UC Davis include the following:

1. Academic factors (50%-60%). College undergraduate plus graduate (if applicable) GPA; GPA of required science coursework; GPA of last two years of undergraduate work; Graduate Record Examination.
2. Nonacademic factors (40%-50%).
 - a. Application narration (5%-20%)
 - b. Animal and veterinary science related experience (See preveterinary adviser.)
 - c. Letters of evaluation (5%-20%)
 - d. Interviews (0%-20%)

The Committee Letter is used by many schools of veterinary medicine. It is San Diego State University's formal endorsement of your candidacy. Two or three additional letters from veterinarians and science faculty are also generally required and used in the selection process. The importance of these letters cannot be overemphasized.

A publication, *Veterinary Medical School Admission Requirements in the United States and Canada* is available in the preprofessional health advising office and in the Campus Store.

The preprofessional health adviser will be available to high school or transfer students by appointment in June and during the August registration period. **All preveterinary students should establish a file in Life Sciences, Room 204, (619) 594-6638, <http://www.sci.sdsu.edu/preprof>.**

Allied Health Professions

The allied health professions in the College of Sciences include chiropractic medicine, dental hygiene, optometry, pharmacy, physician assistant, and podiatric medicine. San Diego State University does not offer specific degree programs in these fields. Prephysical therapy advising is in the Department of Exercise and Nutritional Sciences, ENS 331; telephone (619) 695-5161 (Dr. Denise A. Wiksten or Ronald V. Josephson).

Prechiropractic Medicine, Prepharmacy, Preoptometry, and Prepodiatric Medicine. Students interested in these fields usually major in biology since this curriculum is most appropriate. Other majors, such as chemistry, may be used; however, students must complete the required courses regardless of which major is chosen. In general, all schools require the same courses in biology, chemistry, physics, and mathematics; students should be in contact with the schools of their choice to determine any specific requirements.

Typical Course Requirements for Entrance to a Professional Degree Program in One of the Above Allied Health Professions. Biology 201, 202, 212, 350, 436, 590; Chemistry 200, 201, 231, 431; Mathematics 121, 122; Physics 180A-180B, 182A-182B; Psychology 101; Rhetoric and Writing Studies 100, 200. Students interested in the above allied health professions (except for prephysical therapy) are encouraged to file early in their academic careers at the Preprofessional Health Advisory Office, Life Sciences, Room 204.

Preoccupational Therapy. Students interested in a career in occupational therapy may major in a variety of areas including psychology, 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.

Prephysical Therapy. The prephysical therapy curriculum is pursued in conjunction with an academic major. Students ordinarily select a major in Kinesiology (specialization in Pre-Physical Therapy) and complete selected coursework in other departments. Another departmental 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.

Prephysical therapy requirements. Course requirements for entry to physical therapy school vary according to the school. Generally, prephysical therapy students should include the following courses in their program: Biology 202, 210, 212, 336, and 436; Chemistry 200 and 201; Physics 180A-180B, 182A-182B; and Psychology 101, 270, and 350. Information regarding the required courses for specific physical therapy schools is available through the Department of Exercise and Nutritional Sciences. Each student should consult the major adviser for the level of course required when there are alternatives.

Recommended Electives. In addition to the courses listed, students must complete requirements for their major. In order to enhance preparations for physical therapy, professional school students should consider completing one or more of the following courses: Biology 201 and 590; Chemistry 130; Exercise and Nutritional Sciences 303, 304, 307; Mathematics 121; Psychology 230.

Admission: Most physical therapy schools give preference to students with baccalaureate degrees in academic subjects. The accredited physical therapy programs in California and their entrance requirements are available in a handout from the Department of Exercise and Nutritional Sciences. A list of physical therapy schools in other states can be obtained from the American Physical Therapy Association in Washington, D.C. (www.apta.org).

Students are reminded that requirements for admission to physical therapy school are varied. Therefore, the student should consult the above sources and the school(s) of choice at least two years prior to expected application. 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, and (3) satisfactory completion of the GRE examination.

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 – Postbaccalaureate

The advanced certificate at the postbaccalaureate 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.

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

College
of
Extended Studies

Continuing Education

Continuing Education

Functions

The California State University regards its Extended Education credit-bearing programs as integral parts of the institution. These programs are viewed as extensions of the institution's educational services and are in concert with the institution's overall mission and purpose. The programs and courses in Extended Education are expected to 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 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 mature adults. In addition, it provides a range of academic and special programs for students and groups during the summer months, in the evenings, and between semesters. Under the direction of the Dean of the College, programs are developed and carried out within five divisions: Special Sessions and Extension, Professional Development, American Language Institute, International Training Center, and Administrative Services. The majority of the programs are operated on a self-support basis since state funds are not provided for Continuing Education activities.

Summer Programs

The College of Extended Studies administers a comprehensive summer program for San Diego State University. Approximately 900 courses, workshops, short courses, interdisciplinary and experimental offerings, and special programs are available for matriculated students, students from other institutions, qualified high school students, as well as individuals from the community. Credit earned during the summer is applicable to graduation and residence requirements; however, admission to the University is not required for summer attendance. Enrollment in Summer Sessions courses will be considered for students seeking reinstatement to the University; however, successful completion in such residence courses will not guarantee immediate reinstatement.

Several major sessions are scheduled each summer: two 3-week terms, three 6-week terms, and a variety of other terms. The summer program is offered from approximately the first of June through the middle of August each year.

A graduate student may earn credit in residence that may be used to satisfy the requirements for an advanced degree or for a credential. If a student plans to offer work taken in a summer session to satisfy the requirements for an advanced degree, the student must make early application for admission to the University with classified graduate standing at Graduate Admissions of the Graduate Division.

Students planning to attend the University during the fall semester must be cleared for admission through the Office of Admissions and Records.

The Summer Sessions Bulletin, which includes the registration form and all necessary information about the Summer Sessions, is usually available in mid-March.

Winter Session

The College of Extended Studies administers a special academic program during the winter recess period titled "Winter Session." This special session provides students an opportunity to earn resident academic credit through participation in concentrated coursework. Credit earned during Winter Session is applicable to graduation and residence requirements. Admission to the University is not required for

Winter Session attendance. Enrollment in Winter Session courses will be considered for students seeking reinstatement to the University; however, successful completion in such residence courses will not guarantee immediate reinstatement.

Limitations on Open University and Special Sessions Credit

Not more than nine units of combined coursework in Open University and special sessions completed prior to admission to an advanced degree or an advanced certificate program will be acceptable on a program of study. Of those nine units, not more than six may be at the 600-, 700-, or 800-numbered level. Admission to an advanced program requires formal admission to the University and enrollment in at least one course offered in the regular semester for which the student was admitted, a recommendation of the graduate adviser of the particular program, and the approval of the Dean of the Graduate Division. Once matriculated, students may take additional courses in Open University to meet degree or certificate requirements only with the prior permission of the Dean of the Graduate Division.

Open University

Most regular on-campus courses are open to students through enrollment in Open University. Like courses offered in the summer and winter special sessions, Open University courses earn resident credit, and enrollment for students not seeking an advanced degree or advanced certificate 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 and approval of the chair of the department in which the course is offered. 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 and registration procedures.

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 Test of English as a Foreign Language (TOEFL) or its equivalent.
2. Foreign students with I-20 visas from another university.
3. SDSU matriculated students.

American Language Institute (ALI)

The American Language Institute offers noncredit intensive (20-25 hours per week) English programs throughout the year to students and professionals interested in improving their English proficiency. By enrolling in the ALI, students may take advantage of a program called conditional acceptance. Conditional acceptance is available to those students who require admission, or proof of eligibility for admission, to a university in order to obtain a passport, a U.S. Visa, or government sponsorship. It is offered to students who do not have an adequate command of English or the required TOEFL (Test of English as a Foreign Language) score to qualify for admission to the University. After transcripts of their academic work have been evaluated by SDSU staff, students may receive an official letter of conditional admission which states that the student has met all University requirements except English language proficiency and may enter the University after training at the American Language Institute and achieving appropriate TOEFL scores.

Programs offered by ALI are as follows:

English for Academic Purposes

An 11- to 17-week course for students planning to enter San Diego State or other colleges or universities. Classes are offered in reading, writing, grammar, academic listening/notetaking and academic speaking, as well as in special areas, including TOEFL, GMAT, and GRE test preparation and business topics. In addition, students may choose from over 30 elective course offerings. Students may also specialize in Pre-MBA preparation.

Highly advanced students may register for three to twelve units in the Open University in addition to their English classes.

Intensive English Communications

A 3- to 19-week course emphasizing oral skills and cultural experiences. Classes include eight hours of oral communication in addition to 12 hours of reading, writing, structure, and listening per week. Elective courses are offered and directed activities at SDSU and in the community provide experiences for language use. Professionals in IEC may specialize in Intensive English for Managers. Regular field trips to places of educational and recreational interest are an integral part of the program.

Specific Purposes Programs

Programs for students and professionals with specific needs, including Management and Business English; Business Seminar for International Executives; Seminar for International Teachers of English; Certificate in Business Administration Program; Pre-MBA Preparation; as well as advanced academic skills (statistics review, graduate report writing, research library skills, etc.) are arranged.

Summer and Winter Special Programs

A number of special short-term programs are offered by the ALI each summer and winter (e.g., Management and Business English, Business Seminar for International Executives, Seminar for International Teachers of English, English Language Study Tours). These can be arranged for groups or individuals.

Services

All students at the Institute are offered housing assistance, counseling for university entrance, health services and orientation to university life.

Information about and applications for the ALI can be obtained from the Director, American Language Institute.

Travel Study Programs

The College offers a variety of domestic and foreign travel study programs which are designed to give students and community members an opportunity to travel and earn units of credit.

For further information contact the Coordinator of Travel Study Programs.

Certificate Programs

Professional certificate programs are coordinated by Special Sessions and Extension. Educational services are provided for a wide variety of groups and professional organizations. A complete listing of certificate programs available is in the section of this catalog on "Curricula Summary."

Extension

In order to meet the needs of the adult community, as well as matriculated students, the College provides a variety of extension courses, workshops, and Open University. For the convenience of adult students most courses are scheduled in the evenings or on weekends, on campus or at convenient learning extension centers throughout the service area.

Extension Courses

Extension courses are offered each semester in a number of areas including education, business administration, public administration, 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 one-unit weekend workshops are also offered throughout the year. These courses are listed in a special Extended Studies Program Bulletin published four times a year.

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 bachelor's degree requirements at San Diego State University is 24 units. Extension work is considered the same as transfer credit and is therefore not included in the student's San Diego State University scholastic average.

Retired Adults Education Program

Programs for retired adults are sponsored by the College of Extended Studies at San Diego State University and operate out of two locations—San Diego (Educational Growth Opportunities—EGO) and Rancho Bernardo (The Continuing Education Center at Rancho Bernardo).

Retired adults, who are interested in continued learning, participate in these programs.

For further information, contact the Director of Retired Adult Education Programs.

Professional Development

The Division of Professional Development provides business and industry with programs that are responsive to the training and development needs of their employees. Through the Division's activities, participants are kept abreast of the latest business and managerial techniques that ensure they will add to the productivity and profitability of their organizations.

Custom On-Site Training

SDSU's Professional Development Division of the College of Extended Studies specializes in developing and implementing on-site training programs which meet specific needs of the San Diego business community.

The programs serve small as well as large businesses and organizations with topics ranging from team building and communication skills to supervision, management development, process improvement and executive programs.

Program leaders and training consultants are drawn from the academic and business worlds and have extensive practical experience.

Programs are cost effective and designed with quality and adaptability in mind.

Seminars and Workshops

The Division coordinates practical one- to five-day 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, finance, marketing, manufacturing, quality issues, and customer service issues related to global competitiveness.

Corporate Partnerships: Management Development Center, Institute for Quality and Productivity

The Management Development Center and the Institute for Quality and Productivity are designed as consortia—corporate and government organizations with similar training needs form a partnership with SDSU to produce high quality training programs that meet those objectives. There are many benefits to membership: representatives from member companies sit on advisory boards and play an active role in selecting training courses and instructors. In addition, the annual

membership enables the company to get more training for its training dollars. A third benefit to consortia members is the networking opportunities that develop through association with other companies with similar training needs. The public, however, is welcome to attend most consortia courses.

International Training Center

The International Training Center (ITC) addresses the new opportunities in professional development, training and technology transfer created by the increasing globalization of our economic, social and business activities. The Center is charged institutionally with a wide range of programs dealing with innovation, professionally relevant education and current issues of interest to the international community. Activities include collaborative projects with SDSU's academic colleges and support units to deliver multilingual seminars, workshops, and courses internationally. The Center also advises and provides guidance to SDSU's administration on international agreements and special projects of institutional interest.

The International Training Center brings significant University resources to bear on the challenges of international business and responds to global change through the following mechanisms:

- International videoconferencing, supporting professional and human resource development through interactive satellite communication. International experts present video-seminars on management, technology transfer, and other topics, supporting the training needs of government, industry, and education;
- Technical assistance in the use of modern instructional media;
- Training and professional development on topics related to global competitiveness; and
- Short term training and immersion programs on selected subjects of technological and professional interest.

The International Training Center exists to increase understanding of the new realities of global development, and to serve government and industry through technology training and human resource development.

Regulations and Advising

Academic Advising

Admission and Registration

General Regulations

Academic Advising

Mission and Purpose

Research has indicated that a strong academic advising system is an essential ingredient of undergraduate student success in higher education.

A shared responsibility between adviser and student, academic advising serves to assist students in identifying and assessing academic alternatives and the directions in which they lead. Its purpose is to help students take ultimate responsibility for identifying and making decisions about life goals and making meaningful educational plans that are compatible with those goals. Through academic advising the University provides an environment that is welcoming and supportive.

Why Academic Advising Is Important

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! Planning saves time, money, and aggravation. 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 Is Available to Help Students

- Understand graduation requirements
- Develop an academic plan
- Evaluate transfer credit
- Choose or change a major
- Plan your next semester's schedule
- Clear mathematics and writing competencies
- Remove probationary status to avoid disqualification
- File for graduation
- Investigate job market opportunities

What Are the Students' Responsibilities Regarding Advising?

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.

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. Advisers DO NOT have copies of your records. 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. You can obtain an unofficial copy of your SDSU record for a fee from Admissions and Records. SDSU does not release

copies of other schools' records. Evaluations, test scores, and other important academic information should also be kept in your 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. If you can avoid these busy advising times with a little planning, you will save yourself time and aggravation. Faculty advisers (major advisers) are not always available during the summer months or between semesters.

Order an official degree evaluation as soon as you are eligible. An enrolled and registered undergraduate student with 56 or more earned units, who has a declared major, and has all official transcripts on file, is eligible for an official degree evaluation. Students may submit a request for an evaluation to the Office of Admissions and Records or by calling (619) 594-7800. The evaluation will be mailed to the student in two to six months. An early official evaluation will help assure that you have no surprises at graduation time.

File for graduation. Graduation is not automatic, you must file a graduation application during the stated graduation application periods. Filing early will assure a final graduation evaluation before your last semester of enrollment.

Where To Go For Academic Advising

For general undergraduate advising regarding graduation requirements, General Education, competency requirements, probation and disqualification, and university policies and procedures; if you are undecided about a major; or if you are a Liberal Studies (elementary education) major; go to the University Advising Center, Student Services, Room 1641, (619) 594-6668.

For advising in your major, undergraduate and graduate students should contact the adviser or advising center assigned to your major and class level. A more detailed listing follows.

For advising for students in the Educational Opportunity Program, go to the Office of Educational Opportunity/Ethnic Affairs, Student Services, Room 2209, (619) 594-6298.

For general requirements for the master's or doctoral degrees (except for the major), students should contact the Graduate Division, Centennial Hall, Room 3320, (619) 594-5213.

For teaching credential advising, you should contact the adviser assigned to your specific area. A more detailed listing follows. 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 Center for Careers in Education, Room 100, (619) 594-5964.

For specialized advising such as preprofessional advising (premedical, prelaw, etc.), you should contact the adviser assigned to your preprofessional area. A more detailed listing follows.

Academic Orientation is conducted by the Student Resource Center, Student Services, Room 1602, (619) 594-5521, for new students (freshmen and transfers) and provides important pre-registration group advising. New students will be sent information through the mail.

The following chart lists more specific information regarding the location and telephone numbers of SDSU academic advisers. A more complete directory of academic advisers at SDSU is available on the World Wide Web at <http://libweb.sdsu.edu/advising/advserv.html> or via the printed Directory of Advising Services at SDSU available in the University Advising Center.

Advising Centers

University Advising Center (619) 594-6668
 Student Services, Room 1641 FAX (619) 594-1553
 Email: advising@mail.sdsu.edu

Monday through Thursday, 9:00 a.m. - 6:30 p.m.;
 Friday, 10:00 a.m. - 4:00 p.m.

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

Educational Opportunity/Ethnic Affairs
 Student Services, Room 2209 (619) 594-6298
 Monday through Friday, 8:00 a.m. - 4:00 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:

Allied Health, Life Sciences, Room 204 (619) 594-6638
 Pre dental, Life Sciences, Room 204 (619) 594-6638
 Preeducation, University Advising Center
 Student Services, Room 1641 (619) 594-6668
 Prelaw*, Nasatir Hall, Room 130 (619) 594-5028
 Premedical, Life Sciences, Room 204 (619) 594-6638
 Prenursing, Hardy Tower, Room 54 (619) 594-6527
 Preoccupational Therapy, Exercise and
 Nutritional Sciences, Room 331 (619) 594-5161
 Prephysical Therapy, Exercise and
 Nutritional Sciences, Room 331 (619) 594-5161
 Prephysician Assistant, Life Sciences, Room 204 (619) 594-6638
 Presocial Work, Hepner Hall, Room 148 (619) 594-5803
 Preveterinary Medicine, Life Sciences, Room 204 (619) 594-6638

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

COLLEGE OF ARTS AND LETTERS

Assistant Dean (619) 594-6270
 Nasatir Hall, Room 235
 Africana Studies
 Adams Humanities, Room 3131 (619) 594-6531
 American Indian Studies (Minor)
 Adams Humanities, Room 3104 (619) 594-6991
 American Studies
 Adams Humanities, Room 4207 (619) 594-5262
 Anthropology
 Storm Hall, Room 143B (619) 594-5527
 Asian Studies
 Adams Humanities, Room 4207 (619) 594-5262

Chicana and Chicano Studies
 Adams Humanities, Room 3160 (619) 594-6452
 Classics and Humanities
 Adams Humanities, Room 4231 (619) 594-5186
 Economics
 Nasatir Hall, Room 304 (619) 594-1675
 English and Comparative Literature
 Adams Humanities, Room 4158 (619) 594-5307
 European Studies (Minor)
 Adams Humanities, Room 4231 (619) 594-5186
 French and Italian (Minor)
 Business Administration, Room 304 (619) 594-6491
 Geography
 Storm Hall, Room 323 (619) 594-5437
 German and Russian
 Business Administration, Room 304 (619) 594-6313
 Hebrew
 Business Administration, Room 327 (619) 594-5268
 History
 Adams Humanities, Room 4210 (619) 594-5262
 International Business
 Business Administration, Room 431 (619) 594-3008
 International Security and Conflict Resolution
 Nasatir Hall, Room 109 (619) 594-2778
 Japanese
 Business Administration, Room 327 (619) 594-5268
 Judaic Studies (Minor)
 Adams Humanities, Room 4188 (619) 594-5338
 Latin American Studies
 Storm Hall, Room 146 (619) 594-1103
 Linguistics and Oriental Languages
 Business Administration, Room 327 (619) 594-5268
 Philosophy
 Adams Humanities, Room 4142 (619) 594-5263
 Political Science
 Nasatir Hall, Room 127 (619) 594-6245
 Religious Studies
 Adams Humanities, Room 4231 (619) 594-5185
 Russian and Central European Studies
 Business Administration, Room 304 (619) 594-6313
 Social Science
 Adams Humanities, Room 4192 (619) 594-6344
 Sociology
 Nasatir Hall, Room 203 (619) 594-5449
 Spanish and Portuguese
 Business Administration, Room 403 (619) 594-6588
 Urban Studies
 Professional Studies and Fine Arts, Room 121 (619) 594-6472
 Women's Studies
 Adams Humanities, Room 3138 (619) 594-6524

COLLEGE OF BUSINESS ADMINISTRATION

Assistant Dean
 Business Administration, Room 448 (619) 594-5828

Undergraduate Business Advising Center
 Business Administration, Room 448 (619) 594-5828

Accountancy	Management
Finance	Marketing
Financial Services	Operations
Information Systems	Management
International Business	Real Estate

(See College of Arts and Letters)

Graduate Business Advising Office (619) 594-5217

Student Services, Room 3428
 MBA (various specializations)
 MS in Accountancy
 MS in Business Administration (various concentrations)
 MBA/MA in Latin American Studies

COLLEGE OF EDUCATION (Degrees and Credential Programs)

Assistant Dean
 Education, Room 154F (619) 594-1426

Adaptive Physical Education
 Exercise and Nutritional Sciences, Room 315 (619) 594-4917

Administrative, Rehabilitation and Postsecondary Education
 Hardy Avenue, Room 240 (619) 594-6115
 Administrative Services
 Postsecondary Educational Leadership

Communicative Disorders
 Communications Clinic, Room 121 (619) 594-6774
 Clinical-Rehabilitative Services
 Education Specialist for the Deaf and Hard of Hearing

Counseling and School Psychology
 North Education, Room 179 (619) 594-6109
 Pupil Personnel Services
 School Counseling
 School Psychology

Educational Technology
 North Education, Room 280 (619) 594-6718

Graduate Programs (Master's, Doctoral)
 Education, Room 100K (619) 594-6644

Nursing (Health Services—School Nurse)
 Hardy Tower, Room 58 (619) 594-5495/594-6384

Policy Studies in Language and Cross-Cultural Education
 Education, Room 152 (619) 594-5155
 Multiple and Single Subject B/CLAD Emphasis
 Language Development Specialist Certificate

Social Work
 Hepner Hall, Room 119 (619) 594-5197
 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
 Physical and Health Impairments
 Resource Specialist Certificate of Competence

Certificate Programs
 Bilingual (Spanish)
 Early Childhood special Education
 Resource Specialist
 Supported Employment and Transition Specialist
 Teaching the Emotionally Disturbed/Behaviorally Disordered

Teacher Education
 Education, Room 100 (619) 594-5964
 Multiple Subject CLAD and Single Subject CLAD
 Reading/Language Arts Specialist

COLLEGE OF ENGINEERING

Assistant Dean
 Engineering, Room 200C (619) 594-7007

Aerospace Engineering and Engineering
 Mechanics
 Engineering, Room 308 (619) 594-6074

Civil and Environmental Engineering
 Engineering, Room 424 (619) 594-6071

Electrical and Computer Engineering
 Engineering, Room 426 (619) 594-5781

Mechanical Engineering
 Engineering, Room 323M (619) 594-6067

COLLEGE OF HEALTH AND HUMAN SERVICES

Assistant Dean
 Hepner Hall, Room 124G (619) 594-6898

Communicative Disorders
 Communications Clinic, Room 118 (619) 594-6774

Community Health Education
 Hardy Tower, Room 119 (619) 594-6317

Gerontology
 Hepner Hall, Room 203 (619) 594-6989

Nursing
 Hardy Tower, Room 58 (619) 594-2540

Public Health
 Hardy Tower, Room 129 (619) 594-5528

Social Work
 Hepner Hall, Room 119 (619) 594-6865

COLLEGE OF PROFESSIONAL STUDIES AND FINE ARTS

Assistant Dean
 Professional Studies and Fine Arts, Room 212 (619) 594-5124

Aerospace Studies (Minor)
 Exercise and Nutritional Sciences, Room 385 (619) 594-5545

Art, Design and Art History
 Art, Room 505 (619) 594-6511

Child and Family Development
 Professional Studies and Fine Arts, Room 413 (619) 594-5380

Communication Advising Center (Journalism, Television, Film and
 New Media Production)
 Professional Studies and Fine Arts, Room 229 (619) 594-5145

Exercise and Nutritional Sciences (Kinesiology, Foods and Nutrition)
 Exercise and Nutritional Sciences, Room 331 (619) 594-5161

International Security and Conflict Resolution
 Nasatir Hall, Room 109 (619) 594-2778

Military Science (Minor) Exercise and Nutritional Sciences, Room 451	(619) 594-4943
Music and Dance Music, Room 111	(619) 594-6031
Naval Science (Minor) Exercise and Nutritional Sciences, Room 141	(619) 594-3730
Public Administration and Urban Studies (Criminal Justice Administration, Public Administration) Professional Studies and Fine Arts, Room 105	(619) 594-6224
Recreation, Parks and Tourism Professional Studies and Fine Arts, Room 431	(619) 594-5110
Theatre Dramatic Arts, Room 204	(619) 594-6363
Urban Studies Professional Studies and Fine Arts, Room 121	(619) 594-6472

COLLEGE OF SCIENCES

Assistant Dean Life Sciences, Room 105	(619) 594-5350
Astronomy Physics/Astronomy, Room 210A	(619) 594-6182
Biology Life Sciences, Room 135	(619) 594-6442
Cellular and Molecular Ecology Evolution and Systematics Marine Biology	Microbiology Medical Technology and Public Health Microbiology Zoology
Chemistry (Biochemistry, Chemical Physics) Chemistry/Geology, Room 305	(619) 594-5595
Geological Sciences Chemistry/Geology, Room 204	(619) 594-5586
General Geology Engineering Geology Geochemistry Geophysics	Hydrogeology Marine Geology Paleontology Oceanography (Minor)
International Security and Conflict Resolution Nasatir Hall, Room 109	(619) 594-2778
Mathematical and Computer Sciences (Applied Mathematics, Statistics) Business Administration, Room 203	(619) 594-6191
Oceanography (Minor) Chemistry/Geology, Room 215	(619) 594-5707
Physics (Chemical Physics) Physics, Room 131	(619) 594-6240
Psychology Advising Center Life Sciences, Room 116	(619) 594-5412

DIVISION OF UNDERGRADUATE STUDIES

Associate Dean
Administration, Room 201..... (619) 594-5841
Also advising in:
Interdisciplinary Studies in Three Departments
International Programs

GRADUATE DIVISION

Associate Dean
Centennial Hall, Room 3320 (619) 594-5213
Monday–Thursday, 10:00 a.m.–4:30 p.m.

Advisement concerning general requirements (except for the major). 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.

The following advisers correspond to the various majors and programs:

Liberal Studies Chavela Aguilar	(760) 768-5506
Criminal Justice Administration, Psychology, Liberal Studies, Public Administration Cynthia Flores	(760) 768-5503
Social Science Miguel Rahiotis	(760) 768-5507
International Business/Business Administration, Spanish Miriam Ungson	(760) 768-5505
English, History Jennifer Van Der Linden	(760) 768-5626

Catalogs and Bulletins

The *General Catalog* is published annually in May and can be purchased at The Campus Store. The catalog carries information on admissions, fees and tuition, programs and degrees, courses, scholarships, residence halls, student services and activities, and a faculty directory.

The *Bulletin of the Graduate Division* is published annually in May and can be purchased at The Campus Store.

The *Summer Sessions Bulletin*, issued each April, includes an application form, information on admissions and registration, fees, living accommodations, courses, institutes, workshops, and study tours. It may be obtained free upon request to the Summer Sessions Office.

The *Class Schedule* with instructions for registration is published prior to the opening of each semester and may be purchased at The Campus Store.

Admission and Registration

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. Admission to San Diego State University is selective. Meeting CSU minimum admission criteria **will not** guarantee admission to San Diego State University

Undergraduate Application Filing Periods

Fall Semester	November 1-30
Spring Semester	August 1-31

Undergraduate Application Procedures

Prospective students who are applying for full-time or part-time status, in day or evening classes, must complete a California State University (CSU) undergraduate admission application during the application filing period (see above). Applications may be obtained from the admissions office at any of the campuses of The California State University or at any California high school or community college. The \$55 application fee must be in the form of a check or money order payable to The California State University. An electronic version of the CSU undergraduate application is available on the World Wide Web at <http://www.sdsu.edu/> apply. Credit card payment is also acceptable if applying electronically via the World Wide Web. The application fee is nonrefundable and may not be transferred to a future semester.

Admission decisions are based on the information that the student self reports on the admission application, therefore, 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 and Supplemental Application

You may expect to receive an acknowledgment from San Diego State University verifying receipt of your application. If you are asked to submit the SDSU Supplemental Application, it will be included along with the acknowledgment form.

The questions on the Supplemental Application will help us get to know you better. We would like to know who you are and in what areas you will contribute to our SDSU community.

Undergraduate Admission Requirements

First-Time Freshman Requirements

As San Diego State University has become an increasingly popular campus, known for the quality of its academic and student support programs, admission criteria beyond those required by the CSU system are used for making admission decisions. Because the number of qualified applicants to SDSU exceeds the number of spaces available for admission, the eligibility index necessary for admission will be substantially higher than the CSU minimum needed for consideration.

The following are the **minimum** requirements for admission consideration and **do not** guarantee admission to San Diego State University.

To be considered for admission to San Diego State University, you

1. must submit ACT or SAT I test scores (regardless of high school grade point average)
2. must be a high school graduate,
3. have a qualifiable eligibility index (See "Eligibility Index," below), and
4. have completed the subject requirements with a grade of C or higher by the semester or term designated in "Subject Requirements" below.

Test Scores

Freshman applicants must submit scores from either the Scholastic Aptitude Test (SAT) or the American College Test (ACT). 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 Test Office. Or, you may write to or call:

The College Board (SAT I) Registration Unit, Box 6200 Princeton, New Jersey 08541 (609) 771-7588	American College Testing Program (ACT) Registration Unit, P.O. Box 414 Iowa City, Iowa 52243 (319) 337-1270
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Official scores should be requested from the testing service at the time you register and sent directly to SDSU (SDSU's SAT I code is 4682; SDSU's ACT code is 0398).

Eligibility Index

The eligibility index is the combination of your high school grade point average and your scores on either the American College Test (ACT) or the Scholastic Aptitude Test (SAT I). Your grade point average is based on grades earned during your final three years of high school and bonus points for approved honors courses (excluding grades earned in physical education or military science courses). Up to eight semesters of honors courses taken in the last two years of high school 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.

You can **calculate your eligibility index** by multiplying your grade point average by 800 and adding your total score on the SAT I. Or, if you took the ACT, multiply your grade point average by 200 and add ten times the composite score from the ACT.

Minimum Eligibility Index Needed for Consideration

	Using ACT	Using SAT I
California Residents	694	2900
Non-Residents*	842	3502

* This applies if you did not graduate from a California high school or are not a resident of California for tuition purposes. See section on residency.

Subject Requirements

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

English: 4 years.

Mathematics: 3 years. Algebra, geometry, and intermediate algebra.

US History or US History and Government: 1 year.

Science: 1 year with laboratory. Biology, chemistry, physics, or other acceptable laboratory science.

**Foreign Language: 2 years in the same language (subject to waiver for applicants who can demonstrate equivalent competence).

Visual and Performing Arts: 1 year. Art, dance, drama/theatre, or music.

Electives: 3 years, selected from English, advanced mathematics, social science, history, laboratory science, foreign language, visual and performing arts, and agriculture.

If you are applying for Fall admission, you must complete your subject requirements by the Spring term before enrollment at SDSU. If you are applying for Spring admission, you must complete your subject requirements by the Summer term before enrollment at SDSU.

**NOTE: The foreign language requirement may be satisfied by applicants who demonstrate competence in a language other than English which is equivalent to or higher than expected of students who have completed two years of foreign language study. Consult with your school counselor or any CSU admissions or outreach office for further information.

Subject Requirement Substitution for 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. Please submit your high school transcript with your CSU application.

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 213 or higher (using the computer version) on the Test of English as a Foreign Language (TOEFL).

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. Students who are in this category will NOT receive a supplemental application.

Provisional Admission

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

High School Students

Students still enrolled in high school will be considered for enrollment in certain special courses 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 given course and does not constitute the right to continued enrollment.

Transfer Student Requirements

Lower Division Transfers

A student is considered a **lower division transfer** student if he/she has completed less than 56 semester units of transferable baccalaureate-level college work. In recent years the number of applicants has far exceeded the number of spaces available, and it has become necessary to adopt admission standards which are more demanding than the minimum California State University (CSU) requirements. The following are the **minimum** requirements for admission consideration and **do not** guarantee admission to San Diego State University.

To be **considered** for admission to San Diego State University as a lower division transfer student, you

1. must have a minimum grade point average of 2.0 in all transferable college work attempted, **and**
- 2a. must have met the freshman admission requirements in effect for the term to which you are applying, **or**
- 2b. must be eligible using current freshman admission requirements,

except for the subject requirements, but have made up the missing subject requirements with the appropriate college courses.

Because the number of applicants to SDSU exceeds the number of spaces available for admission, the college grade point average necessary for selection will be substantially higher than 2.0.

Please be advised that the above are **minimum** eligibility requirements for lower division transfer students. Applicants can substantially improve their chances for admission if they need no remediation in mathematics and writing.

The need for mathematics remediation is cleared if you have fulfilled ONE of the following:

1. present an ACT mathematics score of 25 or higher, or an SAT I mathematics score of 560 or higher, **or**
2. passed a transferable college-level mathematics course with a grade of C or better at the time of application. To meet this requirement, the course must have at least intermediate algebra as a prerequisite.

The need for writing remediation is cleared if you have fulfilled ONE of the following:

1. present an ACT English usage score of 25 or higher, or an SAT I verbal score of 550 or higher, **or**
2. passed a transferable college-level English composition course with a grade of C or better at the time of application.

Students with less than 56 semester (84 quarter units) of transferable college credit must submit scores from either the Scholastic Assessment Test (SAT) or the American College Test (ACT). You should take the test as early as possible, but no later than early November if applying for Fall admission. You may get registration forms and the dates for these tests from your high school or college counselors or from the SDSU Test Office. Or, you may write to or call:

The College Board (SAT I) Registration Unit, Box 6200 Princeton, New Jersey 08541 (609) 771-7588	American College Testing Program (ACT) Registration Unit, P.O. Box 414 Iowa City, Iowa 52243 (319) 337-1270
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Official scores should be requested from the testing service at the time you register for the test and sent directly to SDSU (SDSU's SAT I code is 4682; SDSU's ACT code is 0398).

Provisional Admission

All lower-division transfer applicants who are admitted, are admitted provisionally. Offers of provisional admission may be rescinded if work in progress is not completed at a satisfactory level or if any requirements were misrepresented on the application.

Admission and Registration

Making Up Missing College Preparatory Subject Requirements. Undergraduate applicants who did not complete the subject requirements while in high school may make up missing subjects in any of the following ways.

1. Complete appropriate courses with a grade of C or better in adult school or high school summer sessions.
2. Complete appropriate courses in college with a grade of C or better. One college course of at least three semester or four quarter units will be considered equivalent to one year of high school study.
3. Earn acceptable scores on specified examinations.

Please consult SDSU or any CSU campus admissions office for further information about alternative ways to satisfy the subject requirements.

Upper Division Transfers

A student is considered an **upper division transfer** student if he/she has completed 56 or more semester units of transferable baccalaureate-level college work. In recent years the number of applicants has far exceeded the number of spaces available, and it has become necessary to adopt admission standards which are more demanding than the minimum California State University (CSU) requirements.

The following are the **minimum** requirements for admission consideration and **do not** guarantee admission to San Diego State University.

Until Fall 2000, there are two options that can be used for admission consideration.

OPTION A

To be **considered** for admission as an upper division transfer student, you

1. must have completed at least 56 transferable baccalaureate-level semester units (84 quarter units) including transferable courses in oral communication, written communication, critical thinking, and mathematics with a grade of C or better. If you are applying for Fall admission, you must complete your courses in oral communication, written communication, critical thinking, and mathematics by the Spring term before enrollment at San Diego State University. If you are applying for Spring admission, you must complete these courses by the Summer term before enrollment at San Diego State University.
2. must have a minimum grade point average of 2.0 in all college work attempted (a 2.4 GPA is the minimum for non-residents).

Because the number of applicants to SDSU exceeds the number of spaces available for admission, the college grade point average necessary for admission will be substantially higher than 2.0.

Students transferring from California community colleges or other California State Universities can use the appropriately certified "CSU General Education Breadth Requirement" courses to fulfill the oral communication (A1), written communication (A2), critical thinking (A3), and mathematics (B4) requirements. Students transferring from private or out-of-state colleges or universities must submit courses to fulfill the oral communication, written communication, critical thinking, and mathematics requirements that are equivalent to those required by San Diego State University.

OPTION B

To be **considered** for admission as an upper division transfer student, you

1. must have a grade point average of 2.0 (C) or better in all transferable units attempted and are in good academic standing at the last college or university attended, **and**
- 2a. must meet the freshman admission requirements in effect for the term to which you are applying (see Freshman Requirements, preceding page),
- 2b. must be eligible using current freshman admission requirements, except for the subject requirements, but have made up the missing subject requirements (see above) with the appropriate college courses.

Please be advised that the above are **minimum** eligibility requirements for upper division transfer students using Option A. Applicants can substantially improve their chances for admission if they need no remediation in mathematics and writing.

The need for mathematics remediation is cleared if you have fulfilled **ONE** of the following:

1. present an ACT mathematics score of 25 or higher, or an SAT I mathematics score of 560 or higher, **or**
2. passed a transferable college-level mathematics course with a grade of C or better at the time of application. To meet this requirement, the course must have at least intermediate algebra as a prerequisite.

The need for writing remediation is cleared if you have fulfilled **ONE** of the following:

1. present an ACT English usage score of 25 or higher, or an SAT I verbal score of 550 or higher, **or**
2. passed a transferable college-level English composition course with a grade of C or better at the time of application.

Effective Fall 2000, all transfers with 56 or more transferable units **must** complete Option A. Upper division transfers will no longer have the option of following the high school subject pattern (Option B) to establish minimum admission eligibility.

Provisional Admission

All upper-division transfer applicants who are admitted, are admitted provisionally. Offers of provisional admission may be rescinded if work in progress is not completed at a satisfactory level or if any requirements were misrepresented on the application.

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. Possesses a high school diploma (or has established equivalence through either the Tests of General Educational Development or the California High School Proficiency Examination).
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.
4. Test results verifying completion of current San Diego State University competency requirements in mathematics and writing. Current competency requirements and minimum test scores are published in the University 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.

International (Foreign) Student Admission Requirements

San Diego State University offers opportunities for graduate and undergraduate study to those foreign students whose academic preparation meets the standards for admission. "Foreign students" include those who hold US visas as students, exchange visitors, or in other non-immigrant classifications. SDSU uses separate requirements and application filing dates in the admission of foreign students.

Applicants for admission as either graduates or undergraduates whose education has been in a foreign country must file an application for admission, official certificates, and detailed transcripts of record from each secondary school and collegiate institution attended. All documents, transcripts, and test scores must be received by the Office of Admissions and Records no later than July 1 for the fall semester or December 1 for the spring semester of each year. If certificates and transcripts are not in English, they should be accompanied by certified English translations. Credentials will be evaluated in accordance with the general regulations governing admission to San Diego State University.

Applicants whose major education has been in a language other than English must score 550 or more on the Test of English as a Foreign Language (TOEFL). This test is administered in most foreign countries. The University must receive official test scores before admission can be granted. Information as to the time and place at which this test is given may be obtained by writing to the Educational Testing Service (TOEFL), Princeton, New Jersey 08540, USA.

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

Insurance Requirement: As a condition of receiving an I-20 or IAP-66 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 NAFSA: Association of International Educators. The campus President or designee shall determine which insurance policies meet these criteria. Further information may be obtained from the Office of International Student Services.

American Language Institute: If instruction is needed prior to admission to San Diego State University, students may enroll in the American Language Institute. The American Language Institute (ALI) offers preparation in the English language reading, writing, and listening skills necessary for university success. For those students enrolling in the American Language Institute, a conditional admission is available. It is for those students who require acceptance to a university in order to obtain a passport, a U.S. Visa, or government sponsorship. The program is offered to students who do not have an adequate command of English or the required TOEFL (Test of English as a Foreign Language) score to qualify for admission to the University. After transcripts of their academic work have been evaluated, students may receive an official letter of conditional admission which states that the student has met all University requirements *except* English language proficiency and may enter the University after appropriate TOEFL scores and training at the American Language Institute.

Housing and Scholarship: Arrangements for housing should be completed well in advance of the student's arrival on the campus. Detailed information regarding housing may be obtained from the Housing and Residential Life Office, San Diego State University. Scholarship aid for entering students is limited; no scholarships are specifically reserved for students from another country. Further information regarding scholarships will be found in the second of this catalog on Financial Aid and Scholarships.

Upon arrival at San Diego State University the student should contact the Office of International Student Services.

TOEFL Requirement

All undergraduate applicants, regardless of citizenship, who do not have at least three years of full-time study (only transferable courses count toward a student's full-time status) 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 213 or higher (using the computer version) on the Test of English as a Foreign Language (TOEFL).

Filing of Documents

If admitted, official documents *for international applicants* must be on file no later than July 1 for Fall admission or December for Spring admission. (See "Filing of Records below 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. If admitted, you must file the following official transcripts with the Admissions and Records Office:

1. Transcript from high school of graduation or last in attendance (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, or evening courses), even if no courses were completed. Graduate students must file transcripts in duplicate if they plan to enter a master's degree or credential program.
3. Photostat or true copy of the military separation form DD-214 (or equivalent) if applicant has had active military service. (Not required of graduate students.)

A transcript will be considered official if forwarded directly to San Diego State University by the institution attended. All records or transcripts received by the University become the property of the University and *will not be released nor will copies be made.*

Note: All needed documents, for international applicants must be on file no later than July 1 for the fall semester or December 1 for the spring semester.

Graduate and Postbaccalaureate Application Procedures

All graduate and postbaccalaureate applicants (e.g., master's degree applicants, those seeking credentials, and those interested in taking graduate level courses for personal or professional growth) must file a complete graduate application as described in the CSU graduate and postbaccalaureate admission booklet. Applicants who completed undergraduate degree requirements and graduated the preceding term are also required to complete and submit an application and the \$55

nonrefundable application fee. Since applicants for postbaccalaureate programs may be limited to the choice of a single campus on each application, redirection to alternate campuses or later changes of campus choice will be minimal. To be assured of initial consideration by more than one campus, it will be necessary for any applicant to submit separate applications (including fees) to each. Applications may be obtained from the Graduate Studies Office of any California State University campus. An electronic version of the CSU graduate application is available on the World Wide Web at <http://www.csumentor.edu/>.

Graduate and Postbaccalaureate Admission Requirements

Admission Requirements

Graduate and postbaccalaureate applicants may apply for a degree objective, a credential or certificate objective, or may have no program objective. Depending on the objective, San Diego State University will consider an application for admission as follows:

General Requirements

The minimum requirements for admission to graduate and postbaccalaureate 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: (1) have completed a four-year college course of study and hold an acceptable baccalaureate degree from an institution accredited by a regional accrediting association, or shall have completed equivalent academic preparation as determined by appropriate campus authorities; (2) be in good academic standing at the last college or university attended; (3) have attained a grade point average of at least 2.75 (A = 4.0) in the last 60 semester (90 quarter) units attempted (this calculation may not include lower division courses taken after award of a baccalaureate degree); and (4) satisfactorily meet the professional, personal, scholastic, and other standards for graduate study, including qualifying examinations, as appropriate campus authorities may prescribe. In unusual circumstances, a campus may make exceptions to these criteria.

All applicants seeking admission to postbaccalaureate study at San Diego State University must apply and meet the minimum requirements to be accepted in one of the following categories (consult the *Graduate Bulletin* for detailed information):

- **Postbaccalaureate Unclassified.** To enroll in courses for professional or personal growth, you must be admitted as a postbaccalaureate unclassified student. By meeting the minimum requirements, you are eligible for admission as a postbaccalaureate unclassified student. Some departments may restrict enrollment of unclassified students due to heavy enrollment pressure. Admission in this status does not constitute admission to, or assurance of consideration for admission to, any graduate degree or credential program; or
- **Postbaccalaureate Classified.** If you wish to enroll in a credential or certificate program, you will be required to satisfy additional professional, personal, scholastic, and other standards, including qualifying examinations, prescribed by the campus; or
- **Graduate Conditionally Classified.** You may be admitted to a graduate degree program in this category if, in the opinion of appropriate campus authority, you can remedy deficiencies by additional preparation; or
- **Graduate Classified.** To pursue a graduate degree, you will be required to fulfill all of the professional, personal, scholastic, and other standards, including qualifying examinations, prescribed by the campus.

TOEFL Requirement

All graduate and postbaccalaureate applicants, regardless of citizenship, 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 on the Test of English as a Foreign Language (TOEFL). Individual degree programs may prescribe a higher minimum score. Applicants taking the Computer-Based Test of English as a Foreign Language must present a score of 213 or above. Applicants must also submit a score for the Test of Written English (TWE). Individual degree programs may use the score on the TWE as an admission criterion or as an advising tool to identify students who may need further training in English.

Second Bachelor's Degree

Second bachelor's degrees are awarded by most departments. Currently, Business Administration, Chicana and Chicano Studies, and Interdisciplinary Studies in Three Departments do not participate in the second bachelor's degree program. A student wishing to earn a second bachelor's degree must apply for admission through the Office of Admissions and Records during the filing period for undergraduate applicants, unless already enrolled in the University as a postbaccalaureate student. In addition, applicants to the impacted majors: communication (emphases in advertising, public relations, telecommunications and film), criminal justice administration, health science, international business, journalism, and nursing, must apply during the undergraduate application filing period. Upon receipt of the admission application, students will be sent a separate application for a second bachelor's degree.

Admission to a second bachelor's degree program is based on a review of the second bachelor's degree application and the applicant's academic record. Applicants must be eligible for admission as a postbaccalaureate student, meet all undergraduate admission subject requirements, show strong promise of success in the new field, and have a clearly indicated change in educational objective. The number of students admitted for a second bachelor's degree is limited as part of the University's enrollment management program.

Classified graduate students are not eligible to apply for a second bachelor's degree. 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, the student must complete a minimum of 30 postbaccalaureate units in residence with a minimum grade point average of 2.00; at least 15 units must be upper division in the new major. Up to six upper division units from the previous major may be used in the new major, provided the student completed the same number of units above minimum requirements for the first degree. The student must also fulfill all current requirements for the bachelor's degree, including but not limited to General Education, major, upper division writing, and foreign language if required by the major. Students are subject to undergraduate policies and procedures, including rules governing deadlines, course forgiveness, and academic probation and disqualification.

The second bachelor's degree is not granted automatically. When eligible for graduation, you must submit an application for graduation with the Office of Admissions and Records. The Class Schedule each semester specifies the exact dates for filing.

For additional information and second bachelor's degree applications, contact the Office of Admissions and Records.

Admission of Visiting Students Intrasystem Visitor Enrollment

Currently enrolled students at San Diego State University have the opportunity to register at other universities in The California State University system for one term. Students choosing to visit another campus will be on a leave of absence from San Diego State University for the one term.

Eligibility Requirements

Undergraduate: You must have completed at least one term at San Diego State University as a matriculated student and earned at least twelve units. You must have a grade point average of 2.0 or better in all work completed at San Diego State University, be in good standing, and be eligible to register under continuing status at San Diego State University.

Enrollment Conditions

Approval will be for one term only and is subject to space availability and enrollment priority policies of the host campus. To remain beyond the term in which you are a visitor, a regular admission application must be filed. Visitor status will not be approved if the terms overlap on home and host campuses. Concurrent enrollment at another CSU campus is not possible while in visitor status. Financial aid is available to visitors only through the home campus and students eligible for veterans, rehabilitation, social security and other federal, state or county benefits must secure eligibility certification through the home campus. A record of credit earned at the host campus will automatically be sent to San Diego State University. Evidence of completion of course prerequisites may be required at time of enrollment (i.e., personal transcript copy).

Procedures

You must complete a visitor application form and submit it to the Office of Admissions and Records at San Diego State University. San Diego State University completes Part II and forwards to host campus if approved, or returns to student if disapproved. The host campus provides registration instructions if the application is accepted, or returns the application with an explanation if it cannot be accepted.

Impacted Programs

Some majors at San Diego State University receive more applications during the filing period than can be accommodated. These are designated as impacted majors. Admission to these majors is based on additional admission criteria beyond the CSU and SDSU requirements. Further, if you wish to be considered in impacted programs at two or more CSU campuses, you must file an application to each.

Additional admission criteria include ranking on the freshman eligibility index, the overall transfer grade point average, completion of General Education courses, and a combination of campus or departmentally developed criteria. Criteria appear in the November issue of the CSU Review, which is sent to all high school and community college counselors in California, or you may contact the major department for information.

The following majors are impacted at San Diego State University: Business Administration (upper division), Communication (Emphases in Advertising, Public Relations, Telecommunications and Film), Criminal Justice Administration, Health Science, International Business (upper division), Journalism, Nursing, and Television, Film and New Media Production.

Applications selected for admission to the Television, Film and New Media Production major and the Telecommunications and Film emphasis of the Communication major must meet additional criteria before being admitted to SDSU. Applicants in the remaining SDSU impacted majors are admitted as pre-majors.

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, residence questionnaire, and financial aid forms. Further, applicants must have past universities send authentic and official transcripts of all previous academic work attempted. Official transcripts are defined as transcripts sent directly from previous university admissions and records unit to the SDSU Office of Admissions and Records. Failure

to file complete, accurate, and authentic application documents may result in denial of admission, cancellation of academic credit, suspension, or expulsion (Section 41301 of 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.

Requirement and Use of Social Security Account Number

Applicants are required to include their correct social security numbers (taxpayer identification 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. The University uses the social security account number to identify records pertaining to the student as well as to identify the student 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. That information is used 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.

Registration and Requirements for Registration

Registration

San Diego State University students register by the touch tone telephone registration system (RegLine). On-campus registration is not conducted. The Class Schedule and Student Information Handbook, issued each semester and obtainable at the Campus Store before the registration period, contains specific information on registration, the courses offered for the term, and a listing of the fees required for enrollment. Students will not be permitted to access RegLine 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.

Late registration is allowed during the first two weeks of the semester. Students wishing to late register must pay registration fees plus a \$25.00 late fee before the end of the second week of the semester. After receiving an add code from the instructor of the course the student wants to add, the student calls RegLine to officially register. Students who have not added at least one class by the beginning of the fourth week of classes are not registered and may not add courses later in the semester.

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 postbaccalaureate 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.

Statewide Tests Required of Most New Students

The California State University system requires new students to be tested in English and mathematics before enrolling at a CSU campus. These are not admission tests, but a way to determine eligibility to enroll in specific courses. Students might be exempted from one or both of the tests if they have scored well on other specified tests or completed appropriate transfer courses.

Students who are not exempted from the ELM and EPT tests must attempt them before they register. Registration access will be denied until test results are received by SDSU. If ELM or EPT results indicate the need for developmental study (remediation), students will be required to enroll in remedial coursework their first semester at SDSU. If all needed remediation is not completed satisfactorily during the student's first year at SDSU, future registration privileges will be denied.

English Placement Test (EPT). The CSU English Placement Test must be completed by all new non-exempt undergraduates prior to registration. Exemptions from the test are given only to those who present proof of one of the following:

- A score of 3, 4, or 5 on either the Language and Composition or the Composition and Literature examination of the College Board Advanced Placement Program.
- A score on the CSU English Equivalency Examination that qualifies the student "Pass for Credit" or "Exemption" prior to July 1993.
- A score of 470 or above on the Verbal section of the College Board Scholastic Assessment Test (SAT or SAT I) taken prior to April 1995.
- A score of 550 or above on the Verbal section of the College Board SAT I* Reasoning Test taken April 1995 or later.
- A score of 22 or above on the ACT English Usage Test taken prior to October 1989.
- A score of 25 or above on the ACT English Test taken October 1989 and later.
- A score of 600 or above on the College Board Achievement Test* in English Composition *with essay* taken prior to January 1994.
- A score of 600 or above on the College Board SAT II* Writing Test taken between January 1994 and March 1995. (If taken after March 1995, see note below.)
- A score of 660 or above on the College Board SAT II* Writing Test taken on or after April 1, 1995. (See note below.)
- A score of 680 or above on the re-centered and adjusted College Board SAT II: Writing Test taken May 1998 or after.
- For transfer students, completion and transfer to the CSU of a college course that satisfies the General Education Breadth requirement or the Intersegmental General Education Transfer Curriculum requirement in English composition, provided such a course was completed with a grade of C or better.

* NOTE: The College Board SAT and Achievement Tests were replaced by SAT I and SAT II, respectively, beginning March 1994. Beginning April 1, 1995, the SAT I and SAT II exams are scored on a new scale.

Entry-Level Mathematics (ELM) Examination. The ELM examination tests for entry level mathematics skills acquired through three years of rigorous college preparatory mathematics coursework (normally Algebra I, Algebra II, and Geometry). All new undergraduate students must take the test or be exempted from it prior to enrollment for their first semester. Specific policies regarding retesting and placement will be determined by San Diego State University. Exemptions from the test are given only to those students who can present proof of one of the following:

- A score of 3 or above on the College Board Advanced Placement mathematics examination (AB or BC).
- A score of 3 or above on the College Board Advanced Placement statistics examination.
- A score of 560 or above on the mathematics section of the College Board SAT taken prior to March 1994.
- A score of 560 or above on the College Board Mathematics Achievement Test*, Level I or Level II taken prior to March 1994.
- A score of 560 or above on the mathematics section of the College Board SAT I* Reasoning test OR on the College Board

SAT II Mathematics Tests Level I, IC, II, or IIC (Calculator) taken on or after March 1, 1994. (See note below.)

- A score of 24 or above on the American College Testing Mathematics Test taken prior to October 1989.
- A score of 25 or above on the ACT Mathematics Test taken October 1989 and later.
- For transfer students, completion and transfer to the CSU of a college course that satisfies the General Education Breadth requirement or the Intersegmental General Education Transfer Curriculum requirement in Quantitative Reasoning, provided such a course was completed with a grade of C or better.

These tests should be taken at the next opportunity after admission or as soon as possible thereafter

* NOTE: The College Board SAT and Achievement Tests were replaced by SAT I and SAT II, respectively, beginning March 1994. Beginning April 1, 1995, the SAT I and SAT II exams are scored on a new scale; however, the SAT scores qualifying for exemption from the ELM remain the same.

Determination of Residence for Nonresident Tuition Purposes

The Office of Admissions and Records determines the residence status of all new and returning students for nonresident tuition purposes. Responses to the Application for Admission, Residency Questionnaire, and Reclassification Request Form, and, if necessary, other evidence furnished by the student are used in making this determination. A student who fails to submit adequate information to establish a right to classification as a California resident will be classified as a nonresident.

The following statement of the rules regarding residency determination for nonresident tuition purposes is not a complete discussion of the law, but a summary of the principal rules and their exceptions. The law governing residence determination for tuition purposes by The California State University is found in *California Education Code* Sections 68000-68090, 68121, 68123, 68124, and 89705-89707.5, and in Title 5 of the *California Code of Regulations*, Sections 41900-41912. A copy of the statutes and regulations is available for inspection at the campus Admissions and Records Office.

Legal residence may be established by an adult who is physically present in the state and who, at the same time, intends to make California his or her permanent home. Steps must be taken at least one year prior to the residence determination date to show an intent to make California the permanent home with concurrent relinquishment of the prior legal residence. The steps necessary to show California residency intent will vary from case to case. Included among these steps may be registering to vote and voting in elections in California; filing resident California state income tax forms on total income; ownership of residential property or continuous occupancy or renting of an apartment on a lease basis where one's permanent belongings are kept; maintaining active resident memberships in California professional or social organizations; maintaining California vehicle plates and operator's license; maintaining active savings and checking accounts in California banks; maintaining permanent military address and home of record in California if one is in military service.

The student who is within the state for educational purposes only does not gain the status of resident regardless of the length of the student's stay in California.

In general, an unmarried minor (a person under 18 years of age) derives legal residence from the parent with whom the minor maintains or last maintained his or her place of abode. The residence of an unmarried minor cannot be changed by the minor's own act or by the appointment of a legal guardian for the minor, so long as the minor's parents are living.

A married person may establish his or her residence independent of spouse.

An alien may establish his or her residence, unless precluded by the Immigration and Nationality Act from establishing domicile in the United States. An unmarried minor alien derives his or her residence from the parent with whom the minor maintains or last maintained his or her place of abode.

Nonresident students seeking reclassification are required by law to complete a supplemental questionnaire concerning financial independence.

The general rule is that a student must have been a California resident for at least one year immediately preceding the residence determination date in order to qualify as a "resident student" for tuition purposes. A residence determination date is set for each academic term and is the date from which residence is determined for that term. The residence determination dates are September 20 for fall and January 25 for spring.

There are exceptions for nonresident tuition, including:

1. Persons below the age of 19 whose parents were residents of California but who left the state while the student, who remained, was still a minor. When the minor reaches age 18, the exception continues for one year to enable the student to qualify as a resident student.
2. Minors who have been present in California with the intent of acquiring residence for more than a year before the residence determination date, and entirely self-supporting for that period of time.
3. Persons below the age of 19 who have lived with and been under the continuous direct care and control of an adult or adults, not a parent, for the two years immediately preceding the residence determination date. Such adult must have been a California resident for the most recent year.
4. Dependent children and spouses of persons in active military service stationed in California on the residence determination date. The exception, once attained, is not affected by retirement or transfer of the military person outside the state.
5. Military personnel in active service stationed in California on the residence determination date for purposes other than education at state-supported institutions of higher education. This exception continues until the military personnel has resided in the state the minimum time necessary to become a resident.
6. Military personnel in active service in California for more than one year immediately prior to being discharged from the military. Eligibility for this exception runs from the date the student is discharged from the military until the student has resided in state the minimum time necessary to become a resident.
7. Dependent children of a parent who has been a California resident for the most recent year. This exception continues until the student has resided in the state the minimum time necessary to become a resident, so long as continuous attendance is maintained at an institution.
8. Graduates of any school located in California that is operated by the United States Bureau of Indian Affairs, including, but not limited to, the Sherman Indian High School. The exception continues so long as continuous attendance is maintained by the student at an institution.
9. Certain credentialed, full-time employees of California school districts.
10. Full-time State University employees and their children and spouses; State employees assigned to work outside the State, and their children and spouses. This exception applies only for the minimum time required for the student to obtain California residence and maintain that residence for one year.

11. Certain exchange students.

12. Children of deceased public law enforcement or fire suppression employees, who were California residents, and who were killed in the course of law enforcement or fire suppression duties.

Any student, following a final campus decision on his or her residence classification only, may make written appeal to:

The California State University
Office of General Counsel
400 Golden Shore
Long Beach, California 90802-4275

within 120 calendar days of notification of the final decision on campus of the classification. The Office of General Counsel may make a decision on the issue, or it may send the matter back to the campus for further review. Students classified incorrectly 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 subject to discipline pursuant to Section 41301 of Title 5 of the *California Code of Regulations*. Resident students who become nonresidents, and non-resident students qualifying for exceptions whose basis for so qualifying changes, must immediately notify the Admissions and Records Office. Applications for a change in classification with respect to a previous term are not accepted.

The student is cautioned that this summation of rules regarding residency determination is by no means a complete explanation of their meaning. The student should also note that changes may have been made in the rate of nonresident tuition, in the statutes, and in the regulations between the time this catalog is published and the relevant determination date.

Measles and Rubella Immunizations Health Screening Provisions

All new and readmitted students born on or after January 1, 1957 must comply with The California State University requirement to present proof of measles and rubella immunizations. This is **not** an admission requirement but shall be required of students by the beginning of their **second term** of enrollment at SDSU. San Diego State University students who have not complied with this CSU mandate will receive an "I" hold on their second term registration materials. The "I" hold restricts students from enrolling in classes until the immunization requirement is fulfilled.

Because of recent occurrences of measles epidemics on college campuses nationwide, all students are encouraged to consider **receiving a second immunization for measles prior to enrollment**.

Immunization documentation should be mailed or brought to SDSU Student Health Services, Immunization Program, 5500 Campanile Drive, San Diego, CA 92182-4701. For those students unable to obtain acceptable proof of measles and rubella immunizations, Student Health Services will provide immunizations at no cost.

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 who reside in campus residence halls;

Students who obtained their primary and secondary schooling outside the United States;

Students enrolled in dietetics, medical technology, nursing, physical therapy and any practicum, student teaching, or fieldwork involving pre-school-age children and/or school-age children or taking place in a hospital or health care setting.

General Regulations

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 "General Regulations" 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 catalog, students and others who use this catalog should note that laws, rules, and policies change from time to time and that these changes may alter the information contained in this publication. Changes may come in the form of statutes enacted by the Legislature, rules and policies adopted by the Board of Trustees of The California State University, by the Chancellor or designee of The California State University, or by the President or designee of San Diego State University. Further, it is not possible in this publication to include all of the rules, policies, and other information which pertain to the student, 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 and Student Information Handbook outlines changes in academic policy and procedure and current deadlines which are of importance to students.

Nothing in this catalog shall be construed as, operate as, or have the effect of an abridgment or a limitation of any rights, powers, or privileges of the Board of Trustees of The California State University, the Chancellor of The California State University, or the President of San Diego State University. The Trustees, the Chancellor, and the President are authorized by law to adopt, amend, or repeal rules and policies that apply to students. This catalog does not constitute a contract or the terms and conditions of a contract between the student and San Diego State University or The California State University. The relationship of 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) and California Education Code Section 67100 et seq, set out requirements designed to protect the privacy of students concerning their records maintained by the campus. Specifically, the statute and regulations govern access to student records maintained by the campus and the release of such records. In brief, the law provides that the campus must provide students access to records directly related to the student and an opportunity for a hearing to challenge such records on the grounds that they are inaccurate, misleading or otherwise inappropriate. The right to a hearing under the law does not include any right to challenge the appropriateness of a grade as determined by the instructor. The law generally requires that written consent of the student be received before releasing personally identifiable data about the student from records to other than a specified list of exceptions. The institution has adopted a set of policies and procedures concerning implementation of the statutes and the regulations on the campus. Copies of these policies and procedures may be obtained at the Office of the Vice President for Student Affairs. Among the variety of information included in the campus statement of policies and procedures are: (1) the types of stu-

dent records and the information contained therein; (2) the official responsible for the maintenance of each type of record; (3) the location of access lists which indicate persons requesting or receiving information from the record; (4) policies for reviewing and expunging records; (5) the access rights of students; (6) the procedures for challenging the content of student records; (7) the fee that will be charged for reproducing copies of records; and (8) the right of the student to file a complaint with the Department of Education. An office and review board have been established by the Department to investigate and adjudicate violations and complaints. The office designated for this purpose is The Family Educational Rights and Privacy Act Office (FERPA), U.S. Department of Education, 330 "C" Street, Room 4511, Washington, D.C. 20202.

The campus is authorized under the Act to release "directory information" concerning students. Currently, in response to a specific inquiry, the Office of Admissions and Records releases the following: name, major field of study, dates of attendance, and degrees and awards received. While federal law allows for the release of address and telephone number, place and date of birth, and information related to participation in athletics, San Diego State University has developed 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 objection from the student specifying information that the student requests not be released. Students are given an opportunity to restrict the release of "directory information" about themselves by calling the Office of Admissions and Records touch-tone system, (619) 594-7800.

The campus is authorized to provide access to student records to campus officials and employees who have legitimate educational interests in such access. These persons are those who have responsibilities in connection with the campus' academic, administrative or service functions and who have reason for using student records connected with their campus or other related academic responsibilities. Disclosure may also be made 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; to other institutions to which the student is transferring.

Nondiscrimination Policy

San Diego State University prohibits discrimination and harassment on the basis of race, religion, color, gender, age, disability, marital status, sexual orientation, and national origin. Students may file a complaint alleging violation of this policy. Detailed procedures for filing a complaint are available in the Office of the Ombudsmen.

Disability

San Diego State University does not discriminate on the basis of disability in admission or access to, or treatment or employment in, its programs and activities. Section 504 of the Rehabilitation Act of 1973, as amended, and the regulations adopted thereunder and the Americans with Disabilities Act prohibit such discrimination. The Office of Student Affairs has been designated to coordinate the efforts of San Diego State University to comply with these Acts in its implementing regulations. Inquiries concerning compliance may be addressed to this office at Administration 231; telephone (619) 594-5211.

Gender

San Diego State University does not discriminate on the basis of gender in the educational programs or activities it conducts. Title IX of the Education Amendments of 1972, as amended, and the administrative regulations adopted thereunder prohibit discrimination on the basis of gender in education programs and activities operated by San Diego State University. Such programs and activities include admission of students and employment. Inquiries concerning the application of Title IX to programs and activities of San Diego State University may be referred to the Director of Diversity and Equity, the campus officer assigned the administrative responsibility of reviewing such matters, or

to the Regional Director, Office for Civil Rights, Region IX, 50 United Nations Plaza, Room 239, San Francisco, California 94102.

San Diego State University is committed to providing equal opportunities to men and women CSU students in all campus programs, including intercollegiate athletics.

Race, Color, National Origin, or Disability

San Diego State University complies with the requirements of Title VI of the Civil Rights Act of 1964 as amended by the Americans with Disabilities Act and the regulations adopted thereunder. No person shall, on the grounds of race, color, national origin, or disability, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program at San Diego State University.

Inquiries concerning the application of Title VI to program activities of San Diego State University may be referred to the Director of Diversity and Equity.

Sexual Orientation

By CSU Board of Trustees policy, San Diego State University does not discriminate on the basis of sexual orientation.

Immigration Requirements for Licensure

On August 27, 1996, Governor Pete Wilson issued Executive Order W-135-96 which requested that the CSU and other state agencies implement "as expeditiously as reasonably practicable" the provision of The Personal Responsibility and Work Opportunity Reconciliation Act (PRAWORA) of 1996 (P.L. 104-193). The Act, also known as the Welfare Reform Act, included 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 new Personal Responsibility and Work Opportunity Reconciliation Act to achieve licensure.

Grades

Definition of Grades for Undergraduate Students

Grades and grade points per unit used in reporting are as follows: Grade of **A** (outstanding achievement; available only for the highest accomplishment), 4 points; **B** (praiseworthy performance; definitely above average), 3 points; **C** (average; awarded for satisfactory performance; the most common undergraduate grade), 2 points; **D** (minimally passing; less than the typical undergraduate achievement), 1 point; **F** (failing), 0 points; **SP** (satisfactory 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; **Cr** (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** (authorized incomplete), no credit earned and not counted in the grade point average until one calendar year has expired at which time it will count as an "F" for grade point average computation; **U** (unauthorized withdrawal), counted as "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; **C** (minimally passing), 2 points; **D** (unacceptable for graduate credit, course must be repeated), 1 point; **F** (failing), 0 points; **SP** (satisfactory 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; **Cr** (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** (authorized incomplete), no credit earned and not counted in the grade

point average until one calendar year has expired at which time it will count as an "F" for grade point average computation; **U** (unauthorized withdrawal), counted as "F" for grade point average computation.

Plus/Minus Grading

A plus/minus grading system is utilized at San Diego State University. Plus/minus grading is not mandatory but is utilized at the discretion of the individual instructor. The grades of A+, F+ and F- are not issued. The decimal values of plus and/or minus grades are utilized in the calculation of grade point averages as follows:

A = 4.0	C+ = 2.3	D- = 0.7
A- = 3.7	C = 2.0	F = 0
B+ = 3.3	C- = 1.7	U = 0
B = 3.0	D+ = 1.3	I = 0 (when counting as an "F")
B- = 2.7	D = 1.0	

Faculty members use all grades from A through F to distinguish among levels of academic accomplishment. The grade for average undergraduate achievement is C.

Satisfactory Progress Grade – "SP"

The "SP" 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). Failure to complete the assigned work within one calendar year except for courses 799A, 899, General Mathematics Studies 90A, 99A, and Rhetoric and Writing Studies 92A, 94, 97A will result in the course being computed into the grade point average as an "F" (or a "NC" if the course was taken for a credit/no credit grade).

Withdrawal Grade – "W"

The symbol "W" indicates that you were permitted to drop a course after the first four weeks of instruction 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. After the fourth week, the grade of "W" will appear on your permanent record for courses which an official drop has been approved.

Dropping a class after the end of the tenth day of instruction and prior to the last three weeks of instruction is permissible only for verified serious and compelling reasons. Permission to drop a class during this period is granted only with the signature of the instructor, who indicates grade status in the class, and the approval of the dean or designee of the college in which the class is located. If you wish to withdraw from all classes during this period, you must obtain the signature of each instructor and the approval of the dean or designee of the college of your major.

Dropping a class is not permitted during the final three weeks of instruction, 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 "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. To enroll as an auditor, obtain the *Change to Audit Grade* form from the Office of Admissions and Records. Obtain instructor approval and return the completed form on or before the fifteenth day of instruction to the Office of Admissions and Records. Once enrolled as an auditor, you may not change to credit status unless such a change is requested prior to the end of the fifteenth day of instruction. If you are enrolled for credit, you may not change to audit after the end of the fifteenth day of instruction.

Credit/No Credit (Undergraduate Student Option) – “Cr/NC”

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 “Cr/NC.”
2. Courses graded credit/no credit may not be used to satisfy the Communication and Analytical Reasoning section 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 Cr/NC only will not be counted as part of the 15 elective units of Cr/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 by calling RegLine (619-594-7800) on or before the fifteenth day of instruction. 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.”

Authorized Incomplete Grade – “I”

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 Incompletes are available at department offices.

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 computed into the grade point average as an “F” (or a “NC” if the course was taken Cr/NC). 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.

Unauthorized Withdrawal Grade – “U”

The symbol “U” 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 you attend a portion of a course and then, after receiving failing grades, stop attending without officially withdrawing, you should normally receive a final grade of “F” and not “U.”

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” (authorized incomplete) is not counted in the grade point computation until one calendar year has expired, at which time it will count as an “F.” The minimum GPA 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.

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

Course “Forgiveness” and Course Repeat Policy: Undergraduate students are subject to the following conditions and requirements. If you receive a grade of C- or lower (fewer than 2.0 grade points per unit) you may request that the course repeat policy for grade forgiveness be applied to that course. **The course repeat policy can be applied to as many as four repetitions of lower division courses and one upper division course taken at San Diego State University**, except in cases where enrollment is restricted and you no longer qualify for admission to a course.

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 Form* in the Office of Admissions and Records before the end of the add period (or before noon of the third day of Winter or Summer Session classes). 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 calculation of grade point averages.

- A course may be repeated only twice for grade forgiveness. Courses repeated more than once including repeats of those originally taken at another institution all count as part of the five-course maximum. Although the original grade(s) will remain on the transcript, only the latest grade will be used in calculating grade point averages.
- 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.
- 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.
- 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 "NC" does not require the filing of the Course Forgiveness Petition, nor does it subtract from the five forgivable repeats permitted, since the No Credit grade does not affect your GPA.
- 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 "forgiveness" policy applies only to courses repeated at San Diego State University.*
- The course "forgiveness" policy applies to courses repeated at San Diego State University in Summer Sessions and Winter Session and to courses repeated through Open University during Fall and/or Spring semesters.
- If courses with C- or lower grades are repeated without appropriate notification having been filed by the deadline or in excess of course repeat limitations (no more than two repeats per course, no more than five repeats total), course "forgiveness" will not be applied; 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 number of repeats.*
- If you repeat a course in which a grade of C or better was received, only the original grade and units earned will be used for calculation of grade point averages and units needed for a degree.

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 twelve or more months have elapsed since the grade was issued, or you have graduated, no grade change will be considered.

Courses

Satisfaction of Requirements

Except as permitted in the Graduation Requirements section of the catalog, a course cannot be used to satisfy more than one requirement.

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 are reserved for graduate courses in certain professional curricula as part of advanced certificate, credential, and licensure programs and are specifically intended for students admitted to the University with post-baccalaureate classified standing. Courses numbered at the 900 level are not applicable to other graduate programs.

Courses numbered 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 professional advancement units offered only through Extension to meet specific academic needs of community groups and are not acceptable toward an undergraduate or graduate degree.

Undergraduate Enrollment in 600-, 700-, and 800-Numbered Courses

- You must obtain permission of the instructor.
- You must be a senior in good standing and have a B (3.0) GPA average.
- Undergraduate enrollments may not cause the exclusion of a qualified graduate student in a graduate course.
- Undergraduate students must complete a petition for request to enroll which is available in the Graduate Division.

California Articulation Number (CAN)

The California Articulation Number (CAN) identifies some of the transferable, lower division, introductory (preparatory) courses commonly taught within each academic discipline on California college campuses.

The system assures students that CAN courses on one participating campus will be accepted "in lieu of" the comparable CAN course on another participating campus. For example: CAN ECON 2 on one campus will be accepted for CAN ECON 2 on another participating campus.

Courses at San Diego State University that have qualified for CAN designations are listed parenthetically by the course description in the Courses and Curricula section of this catalog.

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.

Academic Credit Through Course-work

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 completed at the end of the semester or term in which the concurrent credit is earned.

A senior who has met all of the required competencies in writing and mathematics and who is within 12 units of completing requirements for the bachelor's degree and whose grade point average in the last 60 semester units attempted is 3.0 or above may petition the Graduate Council to take for concurrent master's degree credit 500-numbered courses listed in the *Bulletin of the Graduate Division* as acceptable for master's degree programs, and certain 600- and 700-numbered courses approved by the department, with the remaining requirements for the bachelor's degree. Petitions may be obtained from the Graduate Division and must be submitted to the Office of Admissions and Records by the end of the third week of classes of the semester or term in which the concurrent credit is earned, and you must have on file a current graduation application for the bachelor's degree. The maximum number of units which 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.

Concurrent Postbaccalaureate Credit

Applicable to the "Fifth Year" Credential Requirement Only

Concurrent postbaccalaureate credit may be earned during the final semester or summer session by seniors admitted to the College of Education who meet all of the following qualifications:

1. Have a minimum grade point average of 2.5 on the last 60 units attempted.
2. Complete coursework in excess of graduation requirements during the semester (or summer session) when graduation occurs.
3. Attempt no more than 18 units during the final undergraduate semester (or 15 units during summer session).
4. Request no more than a maximum of 12 units of 300-, 400-, or 500-numbered courses for postbaccalaureate credit.
5. Submit petition before the end of the first week of classes (or the first week of summer Term A) of the final undergraduate semester (or term) when graduation occurs.
6. Petition the Dean of the College of Education.
7. Graduate at the end of the semester (or summer session) the petition is made.

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 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 professional advancement 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 tests in the College-Level Examination Program, and on Higher Level subjects in the International Baccalaureate program. It 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 below.

Maximum credit of six units may be granted in each of the general examinations in social science, natural science, and humanities. Three units of credit are granted for the general examination in mathematics.

A total of thirty units of credit may be granted for all types of credit by examination. Credit is not allowed if coursework in the subject area has been completed. For further information, contact the Office of Admissions and Records or the University Advising Center.

GENERAL EXAMINATIONS

EXAMINATION	PASSING SCORE	MAXIMUM CREDIT GRANTED	GENERAL EDUCATION CREDIT
Natural Science	500	6 units	3 units in life science 3 units in physical science
Social Science	500	6 units	3 units in social science 3 units in history
Humanities	500	6 units	3 units in literature 3 units in fine arts
Mathematics	500	3 units	None. Satisfies Mathematics Competency requirement only.

SUBJECT EXAMINATIONS

EXAMINATION	PASSING SCORE	MAXIMUM CREDIT GRANTED	SDSU COURSE EQUIVALENT	GENERAL EDUCATION CREDIT GRANTED
College Algebra/ Trigonometry	49	3 units	None	Yes
Calculus with Elementary Functions	51	3 units	MATH 121	Yes
General Chemistry	48	3 units	CHEM 200	Yes

Advanced Placement Credit

EXAMINATION	SEMESTER CREDIT	Semester units credit allowed toward degree	SDSU course equivalents*	REMARKS
Art History.....	3, 4, 5	6	Art 258 and 259	
Art, Studio:				
General	3, 4, 5	6	Art 100 and 101	
Drawing	3, 4, 5	6	Art 100 and 101	
General and Drawing	3, 4, 5	12	Art 100, 101, 102, 103	
Biology	3, 4, 5	6	Biology 100,100L and 2 units of Biology 299	
Chemistry	3, 4, 5	6	Chemistry 200, 201	
Classics:				
Latin Literature	3, 4	5	Classics 202L	If both examinations are passed with scores of 5, additional 3 units credit for Classics 304L will be provided.
	5	6	Classics 202L and 303L****	
Vergil	3, 4	5	Classics 202L	
	5	6	Classics 202L and 303L****	
Computer Science				
A**	3	3	Free electives	
	4, 5	3	Computer Science 107	
AB**	3	6	Computer Science 107 and free electives	
	4, 5	6	Computer Science 107 and 108	
Economics:				
Macro	3, 4, 5	3	Economics 101	
Micro	3, 4, 5	3	Economics 102	
English:				
Lang. and Comp.....	3, 4, 5	6	Rhetoric and Writing Studies 100 and 200	Exempts from CSU English Placement Test and satisfies Writing Competency.
Comp. and Lit.	3, 4, 5	6	English 220 and Rhetoric and Writing Studies 100	
French Language.....	3	6	French 201 and 210	Satisfies the foreign language requirement
	4, 5	6	French 220 and 221	
French Literature	3, 4, 5	6	French 305A and 305B	
German Language.....	3	3	German 200	Satisfies the foreign language requirement.
	4, 5	6	German 201 and 210	
German Literature	3	3	German 202	
	4, 5	3	German 310	
History:				
American.....	3, 4, 5	6	History 110A-110B	Satisfies American History/Institutions and Ideals, and U.S. Constitution requirements. Does not satisfy Calif. government requirement.
European	3, 4, 5	6	History 106 and 3 units of History 299	
Mathematics:				
Calculus AB	3, 4, 5	5	Mathematics 150	Exempts from CSU Entry Level Mathematics Test and satisfies Mathematics Competency.
Calculus BC	3, 4, 5	6	Mathematics 150 and 151	
Calculus AB and BC	3, 4, 5	9	Mathematics 150 and 151	
Music	3, 4, 5	6	Music 205A-205B***	
Music Listening and Literature.....	3, 4, 5	6	Music 151 and 345	
Physics:				
B.....	3, 4, 5	6	Physics 180A-180B and 182A-182B	
C (Mechanics)	3, 4, 5	6	Physics 195, 195L	
C (Electricity and Magnetism)	3, 4, 5	6	Physics 196, 196L	
Political Science				
Govt./Politics: American	3, 4, 5	6	Political Science 101 and 102	Satisfies American History/Institutions and Ideals, and U.S. Constitution requirements. Does not satisfy Calif. government requirement.
Govt./Politics: Comparative	3, 4, 5	6	Political Science 101 and 102	
Govt./Politics: American and Comparative	3, 4, 5	12	Political Science 101, 102, 103, 296	
Psychology	3, 4, 5	3	Psychology 101	
Spanish Language.....	3	6	Spanish 103 and 211	Satisfies the foreign language requirement.
	4, 5	6	Spanish 202 and 212	
Spanish Literature	3, 4, 5	6	Spanish 405A-405B	
Statistics	3, 4, 5	3	Statistics 250	Exempts from CSU Entry Level Mathematics Test and Statistics Mathematics Competency

*Credit may not be earned at SDSU for courses which duplicate credit already allowed for examinations as listed under SDSU course equivalents

**Maximum combined credit six units allowed for Computer Science A and AB examinations.

***Student must also take Music Placement Examination.

****Satisfies the foreign language requirement.

International Baccalaureate Credit				
EXAMINATION	SCORE	Semester units credit allowed toward degree	SDSU course equivalents*	REMARKS
Art/Design	Higher 4-7	6	See department.	
Biology	Higher 4-7	6	Biology 100 and 100L	Two additional units of Biology 299.
English A1	Higher 4-7	6	English 220 and Rhetoric and Writing Studies 100	Exempts from CSU English Placement Test and satisfies Writing Competency.
French	Higher 4-7	6	French 220 and 221	Satisfies Foreign Language Graduation Requirement and lower division prerequisites.
Geography	Higher 4-7	6	Geography 101 and 102	
German	Higher 4-7	6	German 201 and 210	Satisfies Foreign Language Graduation Requirement and lower division prerequisites.
History of the Americas.....	Higher 4-7	6	History 115A and 115B	Satisfies American Institutions, except California government.
Spanish A2.....	Higher 4-7	6	Spanish 202 and 212	Satisfies the Foreign Language Graduation Requirement and lower division prerequisites.
Spanish B.....	Higher 4-7	6	Spanish 202 and 212	Satisfies Foreign Language Graduation Requirement and lower division prerequisites.
Theatre Arts.....	Higher 4-7	6	See department adviser	

*Credit may not be earned at SDSU for courses which duplicate credit already allowed for examinations as listed under SDSU course equivalents.

Credit for Advanced Placement Examinations

San Diego State University grants credit toward its undergraduate degrees for successful completion of examinations of the Advanced Placement Program of The College Board. Students who present scores of three or better may be granted college credit.

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 Admissions and Records.

The Advanced Placement Credit table on the previous page 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 (see table below) on four of the five CLEP General Examinations (Humanities, Mathematics, Natural Sciences, and Social Sciences) and on four of the CLEP Subject Examinations (Calculus with Elementary Functions, College Algebra and Trigonometry, General Chemistry, and Statistics).

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 Admissions and Records.

The table above identifies established course equivalencies. Subject examinations not listed in the table will be evaluated for appropriate course credit by the departmental adviser.

Credit by Examination

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 cal-

culations. At the discretion of the department a grade of Cr/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 Admissions and Records.
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 fall or spring semester. It is not allowed during summer or winter sessions.

Credit for Instruction in Noncollegiate Settings

San Diego State University grants undergraduate degree credit for successful completion of noncollegiate instruction, either military or civilian, appropriate to the baccalaureate, 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 Admissions and Records. 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 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. Only in summer sessions, winter session, or extension courses may a student who has not matriculated be enrolled in classes.

Each student who enrolls in one or more summer session classes shall be classified as a summer session student. Each student who enrolls in one or more extension classes shall for his extension class work be classified as an extension class student. Such students need not be matriculated students as a prerequisite for enrollment in classes.

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.

Student Program and Records

Transcripts of Record

You may obtain an official transcript of your record by filing a transcript request form at the Cashiers Office. A fee is charged for all transcripts and must be paid in advance. Seven to ten days should be allowed for the processing and mailing of the transcript. Transcripts from other schools or colleges become the property of this university and will not be released or copied.

Unofficial Transcripts

You may obtain an unofficial copy of your SDSU transcript by paying the unofficial transcript fee at the Office of Admissions and Records. These transcripts are usually available on an immediate basis. These records do not bear the seal of the University and are not suitable for transfer purposes. Unofficial copies will be made ONLY of the SDSU transcript.

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. You can obtain verification of your enrollment from the Office of Admissions and Records by any of the following methods: (1) in person with proper photo identification in Room 1563 of the Student Services building; (2) by mailing the request

with your authorization and signature, and a stamped, self-addressed envelope to Office of Admissions and Records, San Diego State University, San Diego, CA. 92182-7455.

Prerequisites

Students must satisfy course prerequisites (or their equivalent) prior to beginning the course requiring the prerequisite. Faculty have the authority to enforce prerequisites listed in the catalog, to evaluate equivalent preparation, and to require proof that such prerequisites/preparation have been completed. Faculty may, during the first week of classes, request students without the prerequisites or equivalent preparation to take formal action to drop the course. Failure to comply will result in a failing grade.

Change of Program

San Diego State University provides for change of program beginning the first day of classes every term. Change of program 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, or changing grading options. Change of program is done on Reg-Line, the SDSU touchtone registration system, until the deadline for each activity. For example, students drop classes by calling RegLine through the tenth day of instruction.

You are responsible for every course in which you are registered. If you do not attend the first class meeting of the semester and you are not present at the start of the second meeting, the professor may give your place to another student. If this occurs, you have forfeited your place and the instructor has the right to request that you take formal drop action; you must take this action personally, it is not automatic, and does not happen simply because you do not attend class. If you do not drop the class, you will receive a failing grade.

Dropping a class after the end of the tenth day of instruction and prior to the last three weeks of instruction is permissible only for serious and compelling reasons. Permission to drop a class during this period is granted only with the signature of the instructor, who indicates your grade status in the class, and the approval of the dean or designee of the college in which the class is located. Approvals are made in writing on prescribed forms. After the fourth week of classes, the grade of "W" will appear on your permanent record for courses on which an official drop has been approved.

Students are not permitted to drop a class during the final three weeks of instruction, 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 approved by the dean (or designee) of the college of the student's major.

Deadlines

1. Students may drop courses, without penalty or restriction, until the end of the tenth day of classes. For the Fall 1999 semester, the drop deadline is September 13, 1999. For the Spring 2000 semester, the drop deadline is February 11, 2000.
2. Students may add courses until the end of the fifteenth day of classes. For the Fall 1999 semester, the add deadline is September 20, 1999. For the Spring 2000 semester, the add deadline is February 18, 2000.
3. Students may completely withdraw from SDSU, without penalty or restriction, until the fifteenth day of classes. For the Fall 1999 semester, the withdrawal deadline is September 20, 1999. For the Spring 2000 semester, the withdrawal deadline is February 18, 2000.
4. Students may elect to change the grading option of courses until the fifteenth day of classes. No changes will be made after this deadline. For the Fall 1999 semester, the change in grading option deadline is September 20, 1999. For the Spring 2000 semester, the change in grading option deadline is February 18, 2000.

Change of Major

Based on your application for admission, you are admitted to a major or designated as an 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 Admissions and Records, and required approval of the change by the new major department. After approval, return the form to Admissions and Records. 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 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. You are a candidate for the baccalaureate degree at San Diego State University.
2. You have requested the action formally and have 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; and
4. There is every evidence that you would find it necessary to complete additional units and enroll for one or more additional terms in order to qualify for the baccalaureate degree if the request were not approved.

Final determination that one or more terms shall be disregarded in determination of eligibility for graduation shall be based upon a careful review of evidence by a committee appointed by the President which shall include the Vice President for Academic Affairs and consist of at least three members. Such final determination shall be made only when:

1. Five years have elapsed since the most recent work to be disregarded was completed; and
2. You have completed at SDSU, since the most recent work to be disregarded 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, your 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, may apply toward baccalaureate requirements. However, all work must remain legible on the record ensuring a true and complete academic history.

The procedure for filing Petition for Academic Renewal is as follows:

1. Obtain the petition from the Division of Undergraduate Studies, AD-201.
2. Fill in the form carefully and completely.
3. Attach statements and documentary evidence from doctors, lawyers, employers, parents, professors, or other appropriate persons to substantiate your claim that the request is justified.
4. Obtain all necessary clearances and signatures.
5. Return all materials to the Division of Undergraduate Studies, AD-201.

Withdrawal, Leaves of Absence, Readmission, and Evaluation

Withdrawal

Students who wish to withdraw from the University must initiate action formally through the Office of Admissions and Records. Failure to withdraw will result in a failing grade in all courses. A student who has not paid fees and is not enrolled in at least one class (other than for audit) at the end of the fourth week of instruction (census date) is no longer considered a continuing student and may be required to apply for readmission. Refunds are obtainable only for the first 11 class days after the start of classes. In order to receive a refund, you must file an official withdrawal form and refund request at the Office of Admissions and Records within the first 11 class days of the term.

A course will not appear on the permanent record if withdrawal occurs before the end of the fourth week of classes. After the fourth week, a grade of "W" will appear for courses on which an official drop has been approved. During the final three weeks of instruction, withdrawals are not permitted except in cases where the cause of withdrawal is due to circumstances clearly beyond your control. 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.

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.

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 includes the maintenance of catalog 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 or are subject to disqualification 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 take a leave of absence or cancel it by calling the Admissions and Records Touchtone Information System at (619) 594-7800.

The Class Schedule and Student Information Handbook 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.

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.

Readmission

If you leave the University for more than one semester you must file an application for readmission before the stated closing deadline with a \$55 application fee. If you are enrolled at another institution subsequent to the last attendance at San Diego State University, an official transcript showing work completed must be sent by the transfer institution, directly to the Office of Admissions and Records before readmission can be completed.

Readmitted students may retain rights to graduation requirements in effect when leaving San Diego State University if the following conditions are met:

1. Enroll at least one semester (or two quarters) per year at an accredited institution, and
2. Be absent from San Diego State University for no more than two years, and
3. Remain in good standing (not academically disqualified) at all institutions attended.

In order to retain catalog rights for major requirements, you must maintain the same major at any institution attended during absence from San Diego State University.

Evaluation

An evaluation is a summary of college work completed and of requirements to be completed for a bachelor's degree. To be eligible for an evaluation, a student must be currently enrolled, have completed at least 56 units of acceptable college work, and have a declared major. An evaluation will not be done until official copies of all transfer credit are on file in the Office of Admissions and Records. Only one evaluation will be done for each major.

A student who has earned 56 semester units or more and has not received an evaluation should request an official evaluation. To request an evaluation call (619) 594-7800. The evaluation is made on the regulations in effect at the time the student declares the major, provided continuous enrollment has been maintained, except as otherwise provided in the *California Code of Regulations*, Chapter 5, Section 40401, Election of Regulations. (Further information is given in the section of this catalog on Graduation Requirements.)

Credit and 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 physical education) or three hours of laboratory (as in the sciences) are considered equivalent to one hour of lecture.

During initial RegLine registration, students can enroll in a maximum of 16 units. During the last three days of RegLine and during the add-drop process, this limit is changed to 18 units. 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.

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), and *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 mid-year graduates and at the end of the fall semester for May and summer session 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.

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 session graduates. Departments may set a higher GPA or additional criteria.

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 Admissions and Records no later than the end of the fifth week of the semester in which the student plans to graduate. All changes for summer session graduates must be received by the end of the fifth week of the spring semester prior to graduation.

Dean's List

The Dean's List recognizes academic achievement within a single semester.

Students must place within the top ten percent of the college in which they are majoring and have a grade point average of at least 3.50 based on a minimum of 12 units of credit for courses in which letter grades were assigned. The computation of grade points will be made six weeks after the end of the semester to include students who complete Incomplete grades promptly.

Students will be recognized by the dean of their respective college; undeclared and liberal studies majors will be listed by the Dean of Undergraduate Studies.

Academic Probation, Disqualification, and Reinstatement of Undergraduate Students

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 Session, Winter Session, 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

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.

Reinstatement of Academically Disqualified Students

Disqualified students will not be reinstated earlier than the third semester after disqualification. Students may be considered for reinstatement only after filing an official application for readmission/reinstatement with a \$55 application fee by the published deadlines (November for fall semester and August for spring semester). Under exceptional circumstances the Director of Disabled Student Services or an Assistant Dean for Student Affairs may initiate a petition on behalf of a student for reinstatement before the third semester. Such petitions will be reviewed in the same manner as other reinstatement petitions.

Reinstatement is not automatic. Each applicant will be considered on an individual basis by the college of the applicant's proposed major. Criteria for the adjudication of an application include either or both of the following: removal of the conditions which caused the initial poor academic performance; evidence of baccalaureate coursework which is applicable to the student's degree program at SDSU and completed at a level that clearly indicates progress to degree completion. Because criteria for reinstatement vary, disqualified students should immediately contact the Assistant Dean of the college of their proposed major to find out what criteria will be used to determine their eligibility for reinstatement.

Students accepted for reinstatement will reenter on academic probation. Those readmitted after a break in continuous enrollment will be subject to the catalog requirements in effect at the time they resume study at SDSU or a California community college and remain in continuous attendance (see "Election of Regulations for Graduation" under "Graduation Requirements"). They are not guaranteed reentry into their previously declared majors.

Normally, students who have been disqualified twice from SDSU will not be considered for reinstatement.

Disqualified students should be aware of the following:

1. Grades of less than 2.0 (C) for courses taken at SDSU will not be replaced if the courses are repeated at another college or university. These courses can be repeated during Winter and Summer Sessions through the College of Extended Studies and in Fall and Spring semesters through SDSU's Open University.
2. Grades earned at other accredited colleges or universities do not reduce the SDSU grade point deficiency or change the SDSU grade point average, but are used in the reinstatement process as indicators of the student's future academic success. These grades will be used in calculating the overall GPA. Grades for courses taken during Winter and Summer Sessions through the College of Extended Studies and in Fall and Spring semesters through SDSU's Open University will be used in calculating the student's SDSU GPA.
3. Courses traditionally considered "nonacademic" are inappropriate as indicators of future academic success.
4. Disqualified students who have completed a minimum of 56 baccalaureate units will not be reinstated to the undeclared category.

Administrative Academic Probation and Disqualification

Administrative Academic Probation

An undergraduate or graduate student may be placed on administrative academic probation by action of appropriate campus officials for any of the following reasons:

1. Withdrawal from all or a substantial portion of a program of studies in two successive terms or in any three terms.
2. Repeated failure to progress toward the stated degree or objective or other program objective (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 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).

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 academic probation while on administrative academic 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.

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, must be making satisfactory progress toward that degree under the rules of the institution and the NCAA.

Student Discipline and Grievances

Inappropriate conduct by students or by applicants for admission is subject to discipline on the San Diego State University campus. The Office of Judicial Procedures coordinates the discipline process and establishes standards and procedures in accordance with regulations contained in Sections 41301 through 41304 of Title 5, *California Code of Regulations*. These sections are as follows:

41301. 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 which must be campus related:

- (a) Cheating or plagiarism in connection with an academic program at a campus.
- (b) Forgery, alteration or misuse of campus documents, records, or identification or knowingly furnishing false information to a campus.
- (c) Misrepresentation of oneself or of an organization to be an agent of a campus.
- (d) Obstruction or disruption, on or off campus property, of the campus educational process, administrative process, or other campus function.
- (e) Physical abuse on or off campus property of the person or property of any member of the campus community or of members of his or her family or the threat of such physical abuse.

- (f) Theft of, or nonaccidental damage to, campus property, or property in the possession of, or owned by, a member of the campus community.
- (g) Unauthorized entry into, unauthorized use of, or misuse of campus property.
- (h) On campus property, the sale or knowing possession of dangerous drugs, restricted dangerous drugs, or narcotics as those terms are used in California statutes, except when lawfully prescribed pursuant to medical or dental care, or when lawfully permitted for the purpose of research, instruction or analysis.
- (i) Knowing possession or use of explosives, dangerous chemicals or deadly weapons on campus property or at a campus function without prior authorization of the campus president.
- (j) Engaging in lewd, indecent, or obscene behavior on campus property or at a campus function.
- (k) Abusive behavior directed toward, or hazing of, a member of the campus community.
- (l) Violation of any order of a campus president, notice of which had been given prior to such violation and during the academic term in which the violation occurs, either by publication in the campus newspaper, or by posting on an official bulletin board designated for this purpose, and which order is not inconsistent with any of the other provisions of this Section.
- (m) Soliciting or assisting another to do any act which would subject a student to expulsion, suspension or probation pursuant to this Section.
- (n) For purposes of this Article, the following terms are defined:
 - (1) The term "member of the campus community" is defined as meaning California State University Trustees, academic, nonacademic and administrative personnel, students, and other persons while such other persons are on campus property or at a campus function.
 - (2) The term "campus property" includes:
 - a) real or personal property in the possession of, or under the control of, the Board of Trustees of The California State University, and
 - b) all campus feeding, retail or residence facilities whether operated by a campus or by a campus auxiliary organization.
 - (3) The term "deadly weapons" includes any instrument or weapon of the kind commonly known as a blackjack, slingshot, billy, sandclub, sandbag, metal knuckles; any dirk, dagger, switchblade knife, pistol, revolver, or any other firearm; any knife having a blade longer than five inches; any razor with an unguarded blade, and any metal pipe or bar used or intended to be used as a club.
 - (4) The term "behavior" includes conduct and expression.
 - (5) The term "hazing" means any method of initiation into a student organization or any pastime or amusement engaged in with regard to such an organization which causes, or is likely to cause, bodily danger or physical or emotional harm to any member of the campus community; but the term "hazing" does not include customary athletic events or other similar contests or competitions.
- (o) This Section is not adopted pursuant to Education Code Section 89031.
- (p) Notwithstanding any amendment or repeal pursuant to the resolution by which any provision of this Article is amended, all acts and omissions occurring prior to that effective date shall be subject to the provisions of this Article as in effect immediately prior to such effective date.

**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 ensure 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.

41303. Conduct by Applicants for Admission.

Notwithstanding any provision in this Chapter 1 to the contrary, admission or readmission may be qualified or denied to any person who, while not enrolled as a student, commits acts which, were he enrolled as a student, would be the basis for disciplinary proceedings pursuant to Sections 41301 or 41302. Admission or readmission may be qualified or denied to any person who, while a student commits acts which are subject to disciplinary action pursuant to Section 41301 or Section 41302. Qualified admission or denial of admission in such cases shall be determined under procedures adopted pursuant to Section 41304.

**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, and for qualified admission or denial of admission under Section 41303; 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 Ombudsman's Office in the Student Services building.

Plagiarism

Plagiarism is formal work publicly misrepresented as original; it is any activity wherein one person knowingly, directly, and for lucre, status, recognition, or any public gain resorts to the published or unpublished work of another in order to represent it as one's own. Work shall be deemed plagiarism: (1) when

prior work of another has been demonstrated as the accessible source; (2) when substantial or material parts of the source have been literally or evasively appropriated (substance denoting quantity; matter denoting qualitative format or style); and (3) when the work lacks sufficient or unequivocal citation so as to indicate or imply that the work was neither a copy nor an imitation. This definition comprises oral, written, and crafted pieces. In short, if one purports to present an original piece but copies ideas word for word or by paraphrase, those ideas should be duly noted.

Lindey, Alexander. *Plagiarism and Originality*, 1952.

San Diego State University is a publicly assisted institution legislatively empowered to certify competence and accomplishment in general and discrete categories of knowledge. The President and faculty of this University are therefore obligated not only to society at large but to the citizenry of the State of California to guarantee honest and substantive knowledge in those to whom they assign grades and whom they recommend for degrees. Wittingly or willfully to ignore or to allow students' ascription of others' work to themselves is to condone dishonesty, to deny the purpose of formal education, and to fail the public trust.

The objective of university endeavor is to advance humanity by increasing and refining knowledge and is, therefore, ill served by students who indulge in plagiarism. Accordingly, one who is suspected or accused of disregarding, concealing, aiding, or committing plagiarism must, because of the gravity of the offense, be assured of thorough, impartial, and conclusive investigation of any accusation. Likewise, one must be liable to an appropriate penalty, even severance from the University and in some cases revocation of an advanced degree, should the demonstrated plagiarism clearly call into question one's general competence or accomplishments.

SDSU Alcohol and Substance Abuse Policies

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.

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 & Psychological Services, (619) 594-5220; Housing & Residential Life Office, (619) 594-5742; Student to Student, (619) 594-5803; Center on Substance Abuse, (619) 594-5472; Athletic Department, (619) 594-5164; Student Health Services, (619) 594-4133; Public Safety Department, (619) 594-1987.

For students with substance abuse problems or concerns, assistance is available at SDSU's Counseling & Psychological Services (CPS) located in the Student Services Building, Room 2109. 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 & 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.

One does not, however, have to be addicted or chemically dependent to suffer health risks from the use of illicit drugs or alcohol. These substances can diminish clarity of thinking, physical coordination, mental alertness, and control over impulsive behavior, and can cause short and long term health consequences.

Alcohol related illness now represents the third leading cause of death in the United States. Medical research has established very strong evidence that alcohol abuse contributes significantly to cancer and heart disease. There is clear evidence of serious negative effects

on babies due to use of illicit drugs and alcohol by the mother during pregnancy.

Campus standards of conduct prohibit the unlawful possession, use, or distribution of drugs and alcohol by students on University property or as any part of the University's activities. To enforce SDSU's commitment to these principles, the University will exercise the full measure of its disciplinary powers and cooperate completely 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 is permitted at designated campus locations and events only with prior approval of the Vice President for Student Affairs.

On campus property, the sale, distribution, knowing possession, and use of dangerous drugs or narcotics are prohibited. You are also forbidden by State and Federal laws to sell, distribute, possess, or use those drugs.

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 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 SDSU Department of Public Safety 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 abuse 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.

SDSU Smoke Free Policy

This policy implements CSU Executive Order 599, in accordance with Education Code 89031.

Smoking is prohibited in all San Diego State University buildings or leased spaces and motor pool vehicles.

Smoking is prohibited in those outdoor areas which are either connected to or in close proximity of SDSU buildings or leased space if the smoke can readily enter the building through open doors, windows, or ventilation system intakes.

Smoking is prohibited in outdoor areas immediately adjacent to SDSU owned or leased food establishments unless designated as a smoking area, consistent with the overall goals of this policy; smoking is prohibited in outdoor SDSU owned or leased constructed seating areas where people are likely to congregate, unless designated as a smoking area.

The success of this policy depends upon the thoughtfulness, consideration, and cooperation of everyone. Deans, Directors, and Department Chairs are responsible for implementing this policy. The Associate Vice President for Faculty Affairs and the Director of Personnel Services are available to assist in the policy interpretation and to ensure its consistent application.

To aid persons desiring to stop smoking, the University offers smoking cessation programs for students through Student Health Services and for faculty and staff through Personnel Services.

The SDSU auxiliary organizations shall operate in conformity with this campus policy.

Graduation Requirements

Competency
Upper Division Writing
Major and Minor
American Institutions
Foreign Language
Units
Residence
Grade Point Average
General Education
Application for Graduation

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 and not immediately reinstated you may maintain catalog rights for General Education purposes only by enrolling immediately in a California community college, SDSU Open University, 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, SDSU Open University, or a California community college.

2. You may change to the catalog in effect in the year in which you graduate. Thus, students graduating in December 1999, May 2000, or in the 2000 summer sessions may adopt this catalog by so indicating on their application for graduation.

I. Competency Requirements: Mathematics and Writing

All students, whether freshmen or transfer, 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 below) must take these tests PRIOR to registration in any courses. 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 clear both the mathematics and writing competency requirements by the end of the second semester of enrollment are subject to disenrollment (freshman) or loss of registration priority (transfer).

Students enrolled at the Imperial Valley Campus of SDSU must satisfy the SDSU Transfer Mathematics Assessment [Mathematics Competency] and the SDSU Transfer Writing Assessment [Writing Competency] requirement by the beginning of their second semester at SDSU Imperial Valley Campus. If these requirements are not satisfied, students must then register for and attempt to pass the appropriate General Mathematics Studies or Rhetoric and Writing Studies courses.

Competency requirements are required preparation for a number of specific courses identified in the Class Schedule. Test dates and times are listed in the "Special Tests" section of the current Class Schedule. No student may graduate until all competency requirements are satisfied.

MATHEMATICS REQUIREMENTS: FRESHMEN

Demonstration of mathematics competency is satisfied in one of the following ways:

- I. Passing one of the following national or state tests at the minimum score* or level identified below:
 - a. ELM score of 550 (CSU Entry Level Mathematics).
 - b. SAT or SAT I mathematics score of 560 (Scholastic Aptitude Test or Scholastic Assessment Test).
 - c. ACT mathematics test score of 25 (American College Test) if taken after October 1989.
 - d. ACT mathematics test score of 24 (American College Test) if taken before October 1989.
 - e. AP score of 3 on mathematics AB or BC examination or the statistics examination (The College Board Advanced Placement Program).
 - f. Score of 560 on the College Board Mathematics Achievement Test, Level I or IC or II or IIC.
 - g. Score of 560 on the College Board SAT II Mathematics Test Level I or IC or II or IIC.

OR

- II. Complete BOTH a. and b.
 - a. Attempting and failing the ELM test (CSU Entry Level Mathematics) (score below 550)AND
 - b. Earning Credit (Cr) in General Mathematics Studies 91 or 99C at SDSU.

Credit earned in General Mathematics Studies 90A, 90B, 91, 99A, 99B, or 99C is not applicable to the baccalaureate degree.

MATHEMATICS REQUIREMENTS: TRANSFER STUDENTS

Demonstration of mathematics competency is satisfied in one of the following ways:

- I. Complete BOTH a. and b.
 - a. Passing with a C or better a transferable mathematics course that satisfies General Education in Quantitative Reasoning.AND
 - b. Earning a satisfactory score on any section of the SDSU Transfer Mathematics Assessment Examination [Mathematics Competency, Part C] OR Credit (Cr) in General Mathematics Studies 90B, 91, 99B, or 99C at SDSU.

Transfer students who have completed a college level transferable calculus course equivalent to SDSU's Mathematics 122 or 150 with grade of C or better are exempt from both a and b above.

Credit earned in General Mathematics Studies 90A, 90B, 91, 99A, 99B, or 99C is not applicable to the baccalaureate degree.

OR

- II. Passing one of the following national or state tests at the minimum score* or level identified below:
 - a. ELM score of 550 (CSU Entry Level Mathematics).
 - b. SAT or SAT I mathematics score of 560 (Scholastic Aptitude Test or Scholastic Assessment Test).

* 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.

- c. ACT mathematics test score of 25 (American College Test) if taken after October 1989.
- d. ACT mathematics test score of 24 (American College Test) if taken before October 1989.
- e. AP score of 3 on mathematics AB or BC examination or the statistics examination (The College Board Advanced Placement Program).
- f. Score of 560 on the College Board Mathematics Achievement Test, Level I or IC or II or IIC.
- g. Score of 560 on the College Board SAT II Mathematics Test Level I or IC or II or IIC.

Mathematics Departmental Placement Examination

In addition to satisfying the CSU ELM and SDSU Mathematics Competency requirements, students wishing to enroll in any mathematics, physics, or statistics course must pass the appropriate part of the Mathematics Departmental Placement Examination. These examinations assess mathematical preparation beyond the elementary level. Part IA tests knowledge of intermediate algebra; Part P tests knowledge of college algebra; Part III tests knowledge of trigonometry; Part LS tests numbers and operations, geometry and measurement. Equivalent transfer courses will not grant exemptions from any part of the Placement Examination.

WRITING REQUIREMENTS: FRESHMEN

Demonstration of writing competency is satisfied in one of the following ways:

- I. Passing one of the following national or state tests at the minimum score* or level identified below:
 - a. EPT score of 151 total (CSU English Placement Test).
 - b. SAT or SAT I verbal score of 470 (Scholastic Aptitude Test or Scholastic Assessment Test) taken before March 1995. SAT I verbal score of 550 if taken after March 1995.
 - c. ACT English usage score of 25 (American College Test) if taken after October 1989.
 - d. ACT English usage score of 22 (American College Test) if taken before October 1989.
 - e. AP score of 3 on Language and Composition or Literature and Composition (The College Board Advanced Placement Program).
 - f. Score of 600 on the College Board Achievement Test in English Composition with Essay.
 - g. Score of 600 on the College Board SAT II Writing Test taken before March 1995. Score of 660 on College Board SAT II Writing Test taken between April 1995 and April 1998. Score of 680 or above on College Board SAT II Writing Test taken May 1998 and after.

OR

- II. Complete BOTH a. and b.
 - a. Attempting but failing the EPT (CSU English Placement Test) (score below 151 total)
AND
 - b. Earning credit (Cr) in one of the following courses: Rhetoric and Writing Studies 92A, 92B, 94, 95, 97A, 97B.
Credit earned in Rhetoric and Writing Studies 92A, 92B, 94, 95, or 97A, 97B is not applicable to the baccalaureate degree.

WRITING REQUIREMENTS: TRANSFER STUDENTS

Demonstration of writing competency is satisfied in one of the following ways:

- I. Complete BOTH a. and b.
 - a. Passing with a C or better a transferable GE English Composition course (3 semester or 4 quarter units).
AND
 - b. Passing the SDSU Transfer Writing Assessment [Writing Competency Test] OR earning credit (Cr) in one of the following courses: Rhetoric and Writing Studies 92A, 92B, 94, 95, 97A, 97B.
Credit earned in Rhetoric and Writing Studies 92A, 92B, 94, 95, 97A, or 97B is not applicable to the baccalaureate degree.

OR

- II. Passing one of the following national or state tests at the minimum score* or level identified below:
 - a. EPT score of 151 total (CSU English Placement Test).
 - b. SAT or SAT I verbal score of 470 (Scholastic Aptitude Test or Scholastic Assessment Test) if taken before March 1995. SAT I verbal score of 550 if taken after March 1995.
 - c. ACT English usage score of 25 (American College Test) if taken after October 1989.
 - d. ACT English usage score of 22 (American College Test) if taken before October 1989.
 - e. AP score of 3 on Language and Composition or Literature and Composition (The College Board Advanced Placement Program).
 - f. Score of 600 on the College Board Achievement Test in English Composition with Essay.
 - g. Score of 600 on the College Board SAT II Writing Test if taken before March 1995. Score of 660 on College Board SAT II Writing Test if taken between April 1995 and April 1998. Score of 680 or above on College Board SAT II Writing Test taken May 1998 and after.
Credit earned in Rhetoric and Writing Studies 92A, 92B, 94, 95, 97A, or 97B is not applicable to the baccalaureate degree.

* 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.

II. Upper Division Writing Requirement

All students must demonstrate competency in writing skills as mandated by the major and included in each major description.

Before attempting to satisfy this requirement, students must:

1. Have completed or be completing 60 units;
2. Have fulfilled the EPT and/or Transfer Writing Assessment requirement; and
3. Have completed the General Education Communication and Critical Thinking requirement in Composition and Intermediate Composition and Critical Thinking.

Failure to complete these prerequisites precludes satisfying the requirement by any means. Proof of completion of prerequisites is required for enrollment in courses listed below. When offered in a three-week session, students must, on the first day of class, demonstrate in a diagnostic test that their language skills are sufficiently high to give them a reasonable opportunity to pass the course in shortened format.

Students whose majors do not specify any particular course or procedure may select from the following options:

1. Demonstrating the required proficiency by passing the University Upper Division Writing Examination.
2. Passing with a grade of Cr or C (2.0) or better one of the following courses:

Chicana and Chicano Studies 396W	Journalism 310W
Communication 310W	Linguistics 305W
English 306W	Linguistics 396W
English 508W	Recreation 396W
English 581W	Religious Studies 396W
English 584W	Rhetoric and Writing Studies 305W
History 430W	Rhetoric and Writing Studies 500W
Info and Dec Sys 390W	Rhetoric and Writing Studies 503W
Info and Dec Sys 396W	Sociology 396W

(Note: Several of these courses are limited to majors in the indicated department or have additional prerequisite requirements. Courses required for the major must be taken for a letter grade.)

Students who transfer from another CSU campus having fulfilled the Upper Division Writing requirement will not be required to repeat it. Please note, however, that a course listed above may be required for the major.

II. 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. 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, Bachelor of Music, and Bachelor of Vocational Education degrees; 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 Sessions and Winter Session, 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. Courses taken in the major department or in satisfaction of the major cannot be used to meet requirements in a minor or in General Education. A maximum of three upper division units in excess of 24 for the B.A. degree and 36 for the B.S. degree required for the major but taught outside the major department may be used to satisfy requirements both for General Education and the major if such courses have been approved for General Education. 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 Cr/NC.

A student may wish to major in two departments. If so, the requirements for both majors must be satisfied. Units for courses which could satisfy the requirements in both majors can be counted only once. Only one diploma will be granted but the diploma and transcript will note the completion of each major.

A student may earn two majors in one department only where the specific combinations of majors are authorized in the catalog. 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 Admissions and Records 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. 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, but may be used to satisfy preparation for the major and General Education requirements. Declaration of a minor occurs by obtaining and filing a Declaration of Major or Minor form at the Office of Admissions and Records.

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 three ways:

A. San Diego State University Courses: By passing any one of the following pairs of courses:

Africana Studies 170A and 170B	Political Sci 101 and 102
Chicana and Chicano Studies 120A and 120B	Political Sci 101 and 320
Chicana and Chicano Studies 141A and 141B	Political Sci 102 and 305
History 110A and 110B	Political Sci 102 and 321
History 110A and 310B	Political Sci 102 and 422
History 115A and 115B	Political Sci 305 and 320
History 310A and 310B	Political Sci 305 and 321
History 310A and 110B	Political Sci 305 and 422
History 410A and 410B	Political Sci 320 and 321
History 547A* and 547B*	Political Sci 320 and 422
	Women's Studies 341A-341B

* Three of the six units needed for American Institutions can also be applied to General Education, *except for History 547A and 547B.*

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:

1. Advanced Placement (AP) credit in American history or Government/Politics: American.
2. Course(s) in American history which cover a minimum of 100 years of U.S. history, including the establishment of the U.S. Constitution;

3. An American history course which covers a minimum of 100 years of history AND a course in American Government: 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 SDSU Test Office, OR
 - b. Completing one of the following SDSU courses: Africana Studies 170B; Chicana and Chicano Studies 120B, 141B; History 110B*, 115B, 310B*, 410B, 541B, 547B; Political Science 102**, 320**, 321, 422; Women's Studies 341B.

* Credit will not be granted for this course if the student has taken an equivalent post-Civil War American history course or American history AP credit.

** Credit will not be granted for this course if the student has taken an equivalent American government course or Government/Politics: American AP credit.

V. Foreign Language Requirement

Students whose majors lead to the Bachelor of Arts degree in liberal arts and sciences or the Bachelor of Music degree must satisfy a Foreign Language requirement as indicated below. Communication majors, noncredential candidates with specializations (excluding Intercultural and International Studies) must satisfy a foreign language requirement or an additional mathematics requirement. Refer to the Communication section of this catalog for details. 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 Foreign 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 one foreign or American Indian language. Such competency can be demonstrated by:

1. Successfully completing the third college semester or fifth college quarter in one foreign language;
2. Successfully completing the fourth-year level of high school courses in one foreign language;
3. Successfully completing a third-semester equivalent proficiency examination in one foreign language;
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 a placement (AP) examination in French language, French literature, German language, German literature, Spanish language, or Spanish literature; or passing with a score of 5 in Latin literature or Vergil.
6. Passing with a score of 4 to 7 on the higher level examination for International Baccalaureate credit in French, German, or Spanish.

Conversation courses may not be used in satisfying this requirement.

Students who are majoring in **art history, European studies, humanities, and linguistics** should also read the section on Foreign 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 Foreign Language requirement are:

Chinese 101, 102, and 201
 Classics 101G, 202G, and 303G (Greek)
 Classics 101L, 202L, and 303L (Latin)
 French 100A, 100B, and 201 or 210 or 220 or 221
 German 100A, 100B, and 200, 201 or 202
 Hebrew 101, 102, and 201
 Italian 100A, 100B, and 201 or 210
 Japanese 111, 112, and 211
 Portuguese 101, 201, and 301
 Russian 100A, 100B, and 200A

Spanish 101, 102, and 103 or 202 or 281 or 282

B. The Bachelor of Music degree (except the specialization in Jazz) requires equivalent knowledge demonstrated in a test of reading knowledge administered by the foreign language department concerned in consultation with the Department of Music or by completion of the appropriate language course as follows:

1. *Vocalists* – one semester each of French, German, and Italian.
2. *Music Education* – two semesters of Spanish.
3. *All others* – two semesters of one foreign language chosen from French, German, or Italian (except that classical guitar students may substitute Spanish).

VI. Unit Requirements

A. Total unit requirement. The total number of units necessary for a bachelor's degree (excluding courses numbered 99 and below; also courses numbered 397) is as follows:

1. Bachelor of Arts degree in Applied Arts and Sciences 124
2. Bachelor of Arts degree in Liberal Arts and Sciences 124
3. Bachelor of Science degree in Applied Arts and Sciences 128
4. Bachelor of Science degree in Physical Science 129
5. Bachelor of Science degree in Chemistry 130
- *6. Bachelor of Science degree in Geological Sciences 132
7. Bachelor of Science degree in Engineering 128-140
8. Bachelor of Music degree 132
9. Bachelor of Vocational Education degree 124

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 45
- **3. Bachelor of Science degree in Applied Arts and Sciences (except majors in the College of Business Administration) 45
4. Bachelor of Science degree in Applied Arts and Sciences (all majors in the College of Business Administration) 60
5. Bachelor of Music degree 46-54
6. Bachelor of Vocational Education degree 40

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 extension, Open University, and correspondence courses 24
- **4. From courses graded credit (Cr) 15
5. From topics courses numbered 296, 496, 596 9
6. From General Studies courses numbered 200 and 400 6
7. From courses numbered below 100, and courses numbered 397 0

* Applies to all options except General Geology and Paleontology which require 128 units.

** Upper division courses in the major and minor must be taken for a letter grade unless they are offered only credit/no credit.

8. From all courses numbered 499	9
9. From courses numbered 499 from one department	6
10. From Rhetoric and Writing Studies 296	3
11. From Aerospace Studies, Military Science, and Naval Science courses	24
12. From Music 170-189, 369-389, 569-589 (for non-major and music major for B.A. degree)	8
13. From Music 170-189, 369-389, 569-589 (for music major for B.M. degree in General Music and Music Education)	8
14. From Music 170-189, 369-389, 569-589 (for music major for B.M. degree in Performance, Composition, and Jazz Studies)	12

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 French or Spanish49
 - b. For students majoring in Japanese56
 - c. For students majoring in social work 51
 - d. For students completing the single subject teaching credential program in French or Spanish 52
 - e. For students completing the single subject teaching credential program in Russian 54
 - f. For students majoring in art with an emphasis in studio arts 57
 - g. For students majoring in dance 64
 - h. For students majoring in the School of Communication:
 - Journalism major 52
 - Communication emphases in advertising and public relations51
 - Communication specialization in new media studies57
 - Communication specializations in applied communication studies, critical-cultural studies, interaction studies, intercultural and international studies60
2. **Bachelor of Music degree.** The maximum number of units in upper division music courses acceptable toward the Bachelor of Music degree is 70.
3. **Bachelor of Science degree in Business Administration.** The minimum number of units in business administration and economics courses necessary for a Bachelor of Science degree in any of the ten business majors is 52 (40 percent of 128 units). In addition, the minimum number of units from departments outside of business administration and economics is likewise 52 (40 percent of 128 units).

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 extension prior to Spring 1998, in Open University, and units earned through credit-by-examination may not be applied to these requirements.

VIII. Grade Point Average Requirements

Four averages, each 2.0 or higher, are required for graduation:

- A. An average based on all courses attempted at SDSU.
- B. An average based on all courses attempted at SDSU and transferable courses at other universities, liberal arts colleges, and community colleges.
- C. An average based on all upper division courses attempted in the major department or required for the major.
- D. 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 chapter General Regulations under these headings: Grade Point Average, Grades, Incomplete Grade, and Repeated Course.

IX. General Education*

As an important part of your undergraduate education, you will spend approximately one-third of your college years studying in the General Education program. Coursework in General Education is intended to equip you with the abilities to remember and learn from the past, to experience and enjoy our artistic and literary heritage, to understand and appreciate the multicultural complexity of our society, to comprehend the advances technology will bring, to make educated decisions as a member of the electorate, and to continue learning after your college education is completed.

General Education at SDSU represents both a global and regional perspective. It provides an understanding of various socio-economic backgrounds with the intent of fostering mutual understanding and respect for cultural diversity. In addition, GE develops critical-thinking and interpersonal skills.

In demonstrating the interrelated nature of human endeavors, General Education shows how discipline specific knowledge is linked with other subject areas. With a demonstrated linkage between general education courses and those in other disciplines, you will be able to discern the complexities of society and the environment, and to integrate these into your personal and professional lives.

The program has four major objectives: (1) to develop your intellectual capabilities necessary to the enterprise of learning; (2) to introduce you to modes of thought characteristic of diverse academic disciplines; (3) to help you understand the conditions and forces that shape you as a human being and influence your life; and (4) to help you apply critical and informed judgments to the achievements of your own and other cultures.

The program consists of 49 units divided into four sections: I, Communication and Critical Thinking; II, Foundations; III, American Institutions; IV, Explorations. The sections should be taken in sequence so that you master skills needed to understand the academic disciplines of the University, and to prepare you for the more specialized or interdisciplinary courses in Section IV (Explorations).

Each section has specific educational objectives and courses designed to meet these objectives. For example, courses in Section I, Communication and Critical Thinking, are designed to develop your skills in the areas of written and oral communication, and in reasoning. Courses in Section II, Foundations, use the skills developed in Section I, and provide an introduction to various areas of study. The knowledge you gain in Foundations will help prepare you to live in our multicultural society. Section III, American Institutions courses provide you with knowledge of American democracy and enable you to contribute as a responsible and constructive citizen. Section IV, Explorations, **courses are upper division and should not be taken before you reach junior standing (passing 60 units).** Explorations courses build on the knowledge you gained in the first three sections, and provide more specialized or thematic study in the disciplines included in Foundations.

* Engineering, Liberal Studies, Nursing, and single subject credential majors should refer to the description of their major in the Courses and Curricula section of the General Catalog for a listing of General Education requirements.

Goals and Objectives for General Education

Natural Sciences

You will learn specific ways of knowing and relating to the physical and biological elements of human experience.

You will achieve an understanding of the scientific approach to knowledge; a basic familiarity with significant aspects of the physical and biological environment; and an appreciation of the distinction between basic and applied science and their roles in changing the biological, cultural, economic, physical, and political environments.

Natural science courses provide more than a superficial overview of the currently accepted scientific views of the world. To achieve this end, courses present the philosophical presuppositions and the social and historical context of scientific developments. Courses are directed to the needs and interests of an educated citizen rather than special needs of a potential scientist. Individual courses will vary in the proportion of time devoted to the content as distinct from the methods of science, but the relationship between the general nature of scientific methods and the subject matter in diverse disciplines or areas is part of your education in science.

Natural science courses introduce: a) the nature of the scientific process as this involves the acquisition and assessment of reliable data regarding physical phenomena and the construction and verification of hypothesis; b) unifying concepts in science that transcend technical and disciplinary boundaries as illustrated by facts and principles specific to a particular discipline; c) the quantitative methodology related to the discipline, including elements of problem solving; d) the history of the discipline and its past and present philosophical presuppositions.

Courses often include: e) the characteristics of applied science and technology that represent the immediate concern of many citizens; f) the impact of science on social and economic processes and on public policy; g) sources of scientific information readily accessible to the nonspecialist together with the development of skills and attitudes that make possible the effective use of these sources.

Social and Behavioral Sciences

You will learn that the various social and behavioral science disciplines view human behavior and society from different perspectives including the social, cultural, historical, and geographical. Looking at society from different vantage points helps us understand the many and various dimensions of social and behavioral phenomena.

You will understand the importance of data collection to all of the social and behavioral science disciplines, and that the way information is gathered and interpreted is governed by the major ideas, values, and knowledge base of the particular discipline. These guide social and behavioral scientists in the search for patterns that help us understand who we are and the social-cultural context in which we live.

You will learn that the social and behavioral sciences provides you with information about a world inhabited by people who have created diverse societies and social systems. By increasing your understanding of the complexity of your world and your awareness of the variety of human behavior, groups, and institutions, you will gain a greater appreciation for the diversity of human potential.

You will become aware of your role in society and, thereby, gain an awareness that aids your understanding of your own behavior and the bases for it. You will learn how you came to be the kind of person you are and how this determines your aspirations, values, and sense of reality. This may lead to reaffirmation or changes in attitudes, feelings, and behaviors, and to a more complete understanding of the values of others.

The social and behavioral sciences study human behavior expressed individually and collectively, as well as the development and function of culture and society. You will learn that you are not only an individual, but, as a member of a group; must interact with others in a multicultural environment.

You will learn that both the psyche and society are developmental. There is constant interplay between people and society: individual actions affect groups and groups affect individual actions. This evolutionary process reveals that human beings are continually creating, adapting, and coping with themselves and with society. The study of social and behavioral sciences leads to a realization that you are involved in this mutual interplay in various ways, and it gives you the data and tools to understand, analyze, and criticize the social phenomena you encounter through your life.

Humanities

You will learn that humanities and the fine arts express the human spirit and celebrate our emotions and intelligence.

You will learn to recognize and appreciate the cultural achievements and legacies of civilization and learn that great artists and humanists break the boundaries of time, space and culture and integrate passionate, aesthetic and cognitive domains.

You will learn that values are incorporated in all aesthetic, social, and ethical decisions.

You will learn that reality is structured by the language you speak and by the beliefs inherent in your culture. The ability to perceive, understand, and analyze your cultural environment and to construct your own world views lead to the strength that comes from self-definition and self-knowledge.

Literature, art, music, and drama constitute the creative and performing arts. They depict and express human experience, passion and thought by means of verbal, visual, and aural images, metaphors, and design.

Through the study of foreign languages, you will acquire communication skills by which you will gain an understanding of another culture and its literature.

In philosophy and religious studies, you will learn to understand and analyze values and beliefs and will become aware of the legacy of thought. The study of history will set humankind's acts and achievements in historical perspective, and in integrative areas such as humanities, and women's studies students will approach particular periods and subject matter from a holistic perspective.

General Education courses in natural sciences, social and behavioral sciences, and humanities each present their own disciplined approach to guide students' understanding.

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 12 units from one department can be used in General Education.
2. No more than 7 units from one department can be used in Sections II, III, and IV combined (Foundations, American Institutions, and Explorations).
3. Courses in your major department cannot be used in Section IV (Explorations).
4. A three-unit General Education course required for your major but not in your major department may be used in Section IV, Explorations **only** if your major requires at least three units more than 24 units for the B.A. degree or at least three units more than 36 units for the B.S. degree.
5. Explorations courses may 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) to satisfy your General Education requirements.

1. You transferred from a California community college and have *completed* the Intersegmental General Education Transfer Curriculum (IGETC), or
2. You transferred from a California community college and are certified as having *completed* the 39 lower division CSU General Education pattern (Sections I, II, and III), or
3. You transferred from another California State University campus and have completed all lower division General Education requirements at the CSU campus, or
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 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 University 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.

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)
Chicana and Chicano Studies 111B. Written Communication (3)
Linguistics 100. English Composition for International Students (3)
Rhetoric and Writing Studies 100. Writing and Reading as Critical Inquiry (3)
3. **Intermediate Composition and Critical Thinking.**
Africana Studies 200. Intermediate Expository Writing and Research Fundamentals (3)
Linguistics 200. Advanced English for International Students (3)
Philosophy 110. Critical Thinking and Composition (3)
Rhetoric and Writing Studies 200. Writing from Sources (3)

II. FOUNDATIONS (28 units)

No more than seven units total may be taken in any one department in Foundations, American Institutions, and Explorations 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 section "Special Provision for Majors in the Sciences and Related Fields.")

1. **Physical Sciences**
Astronomy 101. Principles of Astronomy (3)
Chemistry 100. Introduction to General Chemistry with Laboratory (4)
+ Geography 101. Principles of Physical Geography (3)
+ Geography 103. Principles of Meteorology (3)
Geological Sciences 100. Dynamics of the Earth (3)
Natural Science 100. Physical Science (3)
Physics 103. Conceptual Physics (3)
Physics 107. Introductory Physics with Laboratory (4)
2. **Life Sciences**
+ Anthropology 101. Human Biocultural Origins (3)
Biology 100. General Biology (3)
Biology 101. World of Animals (3)
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)
Geography 101L. Physical Geography Laboratory (1)
Geological Sciences 101. Dynamics of the Earth Laboratory (1)
Physics 107. Introductory Physics with Laboratory (4)
4. **Mathematics/Quantitative Reasoning**
You may *not* use Credit/No Credit grades in this section.
Economics 201. Statistical Methods (3)
Mathematics 118. Topics in Mathematics (3)
Mathematics 120. Calculus for Business Analysis (3)
Mathematics 121. Calculus for the Life Sciences I (3)
Mathematics 122. Calculus for the Life Sciences II (3)
Mathematics 140. College Algebra (3)
Mathematics 150. Calculus I (5)
Mathematics 151. Calculus II (4)

+ Only one of these three courses may be taken for General Education credit.

- Mathematics 210. Structure and Concepts of Elementary Mathematics I (3)
- Mathematics 211. Structure and Concepts of Elementary Mathematics II (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 270. Statistical Methods in Psychology (3)
- Sociology 201. Elementary Social Statistics (3)
- Statistics 119. Elementary Statistics for Business (3)
- Statistics 250. Basic Statistical Methods (3)

Special Provision for Majors in the Sciences and Related Fields

Some majors require or recommend coursework in astronomy, biology, chemistry, geological sciences, or physics in preparation for the major. If you have declared one of these majors you may substitute those courses for courses listed under either Life Sciences or Physical Sciences (as appropriate) in Section II.A above.

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

- Africana Studies 101A. Introduction to Africana Studies: Social and Behavioral Sciences (3)
- Anthropology 102. Introduction to Cultural Anthropology (3)
- Economics 100. Contemporary Economic Problems (3)
- Economics 101. Principles of Economics (3)
- Economics 102. Principles of Economics (3)
- Geography 102. Principles of Cultural Geography (3)
- Linguistics 101. Introduction to Language (3)
- Political Science 103. Introduction to Comparative Government (3)
- Psychology 101. Introductory Psychology (3)
- Sociology 101. Introductory Sociology: The Study of Society (3)
- Women's Studies 101. Women and the Social Sciences (3)

C. Humanities. Complete a course in each of four of the following five areas (12 units).

1. Literature

- 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

- Africana Studies 101B. Introduction to Africana Studies: Humanities (3)
- American Indian Studies 110. American Indian Heritage (3)
- Art 157. Introduction to Art (3)
- Art 258. Introduction to Art History (3)
- Art 259. Introduction to Art History (3)
- Chicana and Chicano Studies 100. The Mexican American Heritage (3)
- Classics 140. Our Classical Heritage (3)
- Dance 181. Introduction to Dance (3)
- Humanities 101. Introduction to Humanities (3)
- Humanities 130. The Jewish Heritage I (3)
- Humanities 140. Mythology (3)
- Music 151. Introduction to Music (3)
- Theatre 100. Theatre and Civilization (3)
- Theatre 120. Heritage of Dramatic Literature (3)
- Women's Studies 102. Women in the Humanities (3)

3. History

- History 100. World History (3)
- History 101. World History (3)

- % History 105. Western Civilization (3)
- § History 106. Western Civilization (3)

4. Philosophy and Religious Studies

- Philosophy 101. Introduction to Philosophy: Values (3)
- Philosophy 102. Introduction to Philosophy: Knowledge and Reality (3)
- Philosophy 103. Historical Introduction to Philosophy (3)
- Religious Studies 101. World Religions (3)
- Religious Studies 102. Introduction to Religion (3)

5. Foreign Language

- 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. Elementary Greek I (5)
- Classics 101L. Elementary Latin I (5)
- Classics 120. English from Latin and Greek (3)
- Classics 202G. Elementary Greek II (5)
- Classics 202L. Elementary Latin II (5)
- French 100A. Elementary French I (5)
- French 100B. Elementary French II (5)
- French 201. Readings in French (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. German for Reading Comprehension (3)
- Hebrew 101. Elementary Hebrew I (3)
- Hebrew 102. Elementary Hebrew II (4)
- Italian 100A. Elementary Italian I (5)
- Italian 100B. Elementary Italian II (5)
- Italian 201. Reading and Speaking Italian (3)
- Italian 210. Intermediate Grammar and Composition (3)
- Japanese 111. Elementary Japanese I (6)
- Japanese 112. Elementary Japanese II (6)
- Japanese 211. Intermediate Japanese I (6)
- Japanese 212. Intermediate Japanese II (6)
- Linguistics 242. Experiences in Foreign Language Study (3)
- Portuguese 101. Elementary/Intensive Portuguese I (5)
- Russian 100A. First Course in Russian (5)
- Russian 100B. Second Course in Russian (5)
- Russian 200A. Third Course in Russian (5)
- Russian 200B. Fourth Course in Russian (5)
- Russian 211. Intermediate Conversation (3)
- Spanish 101. Introduction to Spanish I (4)
- Spanish 102. Introduction to Spanish II (4)
- Spanish 103. Introduction to Spanish III (4)
- Spanish 202. Intermediate (4)
- Spanish 211. Intermediate Conversation and Reading (3)
- Spanish 212. Intermediate Conversation and Writing (3)
- Spanish 281. Intermediate Spanish for U.S. Hispanics (3)
- Spanish 282. Intermediate Spanish for U.S. Hispanics (3)

* Cultural diversity course.

Only one of these two courses may be taken for General Education credit.

† Either this course or History 422 may be taken for General Education credit.

% Not open to students with credit in History 305A.

§ Not open to students with credit in History 305B.

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.

Students who clear American Institutions with a course that does not meet General Education requirements may select an additional three unit course from Social and Behavioral Sciences II.B. or IV. B.

Refer to section of catalog on American Institutions Requirement for approved sequences.

IV. EXPLORATIONS

Courses in this area must not be taken sooner than the semester in which you achieve upper division standing (60 units passed.) Courses in the major department may not be used to satisfy upper division General Education.

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, Geological Sciences, Mathematical Sciences, Natural Science, Nursing, and Physics may replace the area A course with an additional course from area B or C.)

A. Natural Sciences. Complete one course.

- * Anthropology 402. Dynamics of Biocultural Diversity (3)
- Astronomy 301. Cosmology and Gravitational Collapse (3)
- Biology 307. Biology of Sex (3)
- Biology 315. Ecology and Human Impacts on the Environment (3)
- Biology 318. The Origins of Life (3)
- Biology 319. Evolution (3)
- Biology 321. Human Heredity (3)
- Biology 324. Life in the Sea (3)
- Biology 326. Plants, Medicines, and Drugs (3)
- Biology 327. Conservation of Wildlife (3)
- Biology 336. Principles of Human Physiology (3)
- Biology 339. Sociobiology (3)
- Biology 341. The Human Body (3)
- Engineering 320. Control of the Human Environment (3)
- # General Studies 340. Confronting AIDS (3)
- Geological Sciences 301. Geology of National Parks and Monuments (3)
- Geological Sciences 302. Fossils: Life Through Time (3)
- Geological Sciences 303. Natural Disasters (3)
- Geological Sciences 304. Planetary Geology (3)
- Mathematics 303. History of Mathematics (3)
- Natural Science 305. Quantum Reality—From Quarks to Quasars (3)
- Natural Science 315. History of Science I (3)
- Natural Science 316. History of Science II (3)
- Natural Science 317. Development of Scientific Thought (3)
- Natural Science 333. Technology and Human Values (3)
- Oceanography 320. The Oceans (3)
- Physics 301. Energy and the Environment (3)

B. Social and Behavioral Sciences. Complete one course.

- * Africana Studies 320. Politics and Economics of Black Urban Development (3)
- * Africana Studies 321. Black Political Participation in America (3)
- * Africana Studies 322. African American Political Thought (3)
- * Africana Studies 325. Public Policy and Afro-American Community (3)
- * Africana Studies 341. Cultural Patterns and African American Identity (3)
- * Africana Studies 380. Blacks in the American Justice System (3)
- * Africana Studies 420. Afro-Americans and the Politics of Urban Education (3)
- * Africana Studies 445. Ethnicity and Social Psychology (3)
- * American Indian Studies 320. American Indians in Contemporary Society (3)
- * Anthropology 350. World Ethnography (3)
- * Anthropology 410. Language in Culture (3)
- * Anthropology 430. Anthropology of Law and Dispute Processing (3)
- Anthropology 432. Principles of Personality in Culture (3)
- Anthropology 439. Cultural Comparisons Through Film (3)
- * Anthropology 442. Cultures of South America (3)
- * Anthropology 445. Ethnology of North America (3)
- * Anthropology 446. Southwestern Ethnology (3)

- * Anthropology 448. Cultures of Oceania (3)
- * Anthropology 449. Cultures of Sub-Saharan Africa (3)
- * Anthropology 450. Cultures of India (3)
- * Anthropology 452. Japanese Society (3)
- * Anthropology 453. Cultures of Southeast Asia (3)
- *† Asian Studies 460. Contemporary Issues in Filipino-American Communities (3)
- * Chicana and Chicano Studies 301. Political Economy of the Chicano People (3)
- * Chicana and Chicano Studies 303. Mexican American Community Studies (3)
- * Chicana and Chicano Studies 320. Mexican American Life Styles (3)
- * Chicana and Chicano Studies 355. The United States-Mexico International Border (3)
- * Communication 371. Intercultural Communication (3)
- * Communication 408. Mass Communication and Society (3)
- # Community Health Education 353. Sexually Transmitted Diseases (3)
- * Community Health Education 362. International Health (3)
- Economics 330. Comparative Economic Systems (3)
- * Economics 464. Economic Problems of Latin America (3)
- * Economics 465. Economic Problems of South and East Asia (3)
- Economics 489. Economics and Population (3)
- Education 350. Education in American Society (3)
- General Studies 330. Plagues Through the Ages (3)
- General Studies 420. Disability and Society (3)
- * Geography 312. Culture Worlds (3)
- Geography 321. United States (3)
- * Geography 323. Middle America (3)
- * Geography 324. South America (3)
- Geography 336. Europe (3)
- Geography 337. Republics of the Former Soviet Union (3)
- Geography 354. Geography of Cities (3)
- Geography 370. Environmental and Natural Resource Conservation (3)
- * 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)
- Linguistics 354. Language and Computers (3)
- Linguistics 420. Linguistics and English (3)
- † Management 456. Conceptual Foundations of Business (3)
- Political Science 301A. History of Western Political Thought (3)
- Political Science 301B. History of Western Political Thought (3)
- Political Science 302. Modern Political Thought (3)
- Political Science 356. Governments of Continental Europe (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 370. Political Violence (3)
- Psychology 340. Social Psychology (3)

* Cultural diversity course.

Only one of these two courses may be taken for General Education credit.

† Either this course or History 422 may be taken for General Education credit.

‡ Majors in the College of Business Administration may not use this course to satisfy requirements for General Education.

Psychology 351. Psychology of Personality (3)

- Recreation 304. Challenges of Leisure (3)
- Recreation 305. Wilderness and the Leisure Experience (3)
- * Social Work 350. Cultural Pluralism (3)
- Social Work 360. Perspectives on Human Behavior and the Social Environment (3)
- Sociology 320. Sex/Gender Roles in American 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)
- Sociology 410. Social Psychology: Mind, Self, and Society (3)
- Sociology 421. The American Family and Its Alternatives (3)
- Sociology 430. Social Organization (3)
- Sociology 450. Social Change (3)
- * Women's Studies 310. Women in Cross-Cultural Perspective (3)
- * Women's Studies 320. Socialization of Women (3)
- * Women's Studies 325. Psychology of Women (3)
- * Women's Studies 370. Women and the Law (3)
- * Women's Studies 375. Sex, Power, and Politics (3)
- * Women's Studies 385. Women's Work (3)

C. Humanities. Complete one course.

- * Africana Studies 365. African American Literature (3)
- * Africana Studies 385. African American Music (3)
- * Africana Studies 460. Black Images in Western Literature (3)
- * Africana Studies 463. Black Literatures of the World (3)
- * Africana Studies 464. Caribbean Literature (3)
- * Africana Studies 470. Comparative History: Afro-American and African Heritage (3)
- * Africana Studies 472. Comparative Slavery (3)
- * American Indian Studies 300. American Indian Oral Literature (3)
- * American Indian Studies 430. American Indian Poetry and Fiction (3)
- * American Indian Studies 440. American Indian History (3)
- * American Indian Studies 470. Roots of Indian Tradition (3)
- * Anthropology 349. Roots of Civilizations (3)
- * Anthropology 422. Music and Culture (3)
- Anthropology 424. Primitive Religion (3)
- * Asian Studies 458. Asian Traditions (3)
- * Asian Studies 459. Contemporary Asian Cultures (3)
- * Chicana and Chicano Studies 310. Mexican and Chicano Music (3)
- * Chicana and Chicano Studies 335. Mexican American Literature (3)
- * Chicana and Chicano Studies 350A. Chicano History (3)
- * Chicana and Chicano Studies 350B. Chicano History (3)
- * Chicana and Chicano Studies 375. US/Mexico Border History (3)
- * Chicana and Chicano Studies 376. Mexican American Culture and Thought (3)
- * Chicana and Chicano Studies 380. US/Mexico Borderlands Folklore (3)
- * Chicana and Chicano Studies 400. Mexican Images in Film (3)
- Chinese 301. Advanced Chinese I (3)
- Chinese 302. Advanced Chinese II (3)
- Classics 303G. Readings in Greek Prose (3)
- Classics 303L. Readings in Latin Prose (3)
- Classics 304G. Readings in Greek Poetry (3)
- Classics 304L. Readings in Latin Poetry (3)
- Classics 310. Classical Mythology (3)
- Classics 320. Classical Literature (3)
- Classics 330. Classical Drama (3)
- Classics 340. Classical Civilization (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 455. Classical Asian Literature (3)
- * Comparative Literature 460. Modern Asian Literature (3)
- * Comparative Literature 470. Folk Literature (3)
(Maximum GE credit 3 units)
- English 301. The Psychological Novel (3)
- @ English 302. Introducing Shakespeare (3)
- English 405. The Bible as Literature (3)
[Same course as Comparative Literature 405.]
- English 494. Modern American Fiction (3)
- French 301. Advanced Grammar and Composition (3)
- French 302. Translation and Stylistics (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 425. Francophone Africa in Literature and Film (3)
- General Studies 450. Life and Culture Semester Abroad (3)
- German 301. Grammar and Composition (3)
- German 310. Introduction to German Literature (3)
- ^German 320. German Film (3)
- % History 305A. Sources of Western Civilization (3)
- § History 305B. Sources of Western Civilization (3)
- * History 402. History of Childhood (3)
- * History 406. History of Sexuality (3)
- History 407A. Modern Europe (3)
- History 407B. Modern Europe (3)
- * History 415A. Latin America (3)
- * History 415B. Latin America (3)
- * History 420. Asia's Dynamic Traditions (3)
- * History 421. Asia's Emerging Nations (3)
- *† History 422. Southeast Asian and Filipino Experience in America (3)
- History 440. The Holocaust and Western Civilization (3)
- History 441. Environmental Problems in Historical Perspective (3)
- History 442A. People Out of Our Past (3)
- History 442B. People Out of Our Past (3)
- * History 473A. Middle Eastern History from the Rise of Islam to the Present (AD 600-AD 1600) (3)
- * History 473B. Middle Eastern History from the Rise of Islam to the Present (AD 1600-present) (3)
- * History 475A. Africa (3)
- * History 475B. Africa (3)
- History 480. History of Corporations in the Modern World (3)
- * History 488. Modern Jewish History (3)
- Humanities 310. French Civilization (3)
- Humanities 320. German Civilization (3)
- Humanities 330. Russian Civilization (3)
- Humanities 340. Italian Civilization (3)
- Humanities 401. The Medieval Heritage (3)
- Humanities 402. The Renaissance (3)
- Humanities 403. The Baroque and the Enlightenment (3)
- Humanities 404. The Modern European Heritage (3)

* Cultural diversity course.

@ English 533 may not be used in place of English 302 for General Education credit.

% Not open to students with credit in History 105.

§ Not open to students with credit in History 106.

^ Taught in English.

† Either Asian Studies 460 (IV.B.) or History 422 (IV.C.) may be taken for General Education credit.

* Humanities 460. African Civilizations (3)

Italian 301. Advanced Oral and Written Composition (3)

Graduation Requirements

- Italian 305A. Italian Literature (3)
- Italian 421. Italian Civilization (3)
- Japanese 311. Third Year Japanese I (4)
- Japanese 312. Third Year Japanese II (4)
- Linguistics 410. History of English (3)
- * Music 345. World Music in Contemporary Life (3)
- Music 351A. Musical Masterpieces of the Eighteenth and Nineteenth Centuries (3)
- Music 351B. Musical Masterpieces of the Twentieth Century (3)
- Music 351D. Jazz History and Appreciation (3)
- Philosophy 305. Classics of Western Philosophy (3)
- Philosophy 310. Philosophy and Human Nature (3)
- Philosophy 329. Social Ethics (3)
- Philosophy 330. Medical Ethics (3)
- Philosophy 332. Environmental Ethics (3)
- Philosophy 333. Philosophy of Technology (3)
- Philosophy 334. Philosophy of Literature (3)
- * Philosophy 351. Chinese Philosophy (3)
- Portuguese 301. Intermediate Portuguese Grammar and Composition (3)
- Portuguese 401. Advanced Portuguese Grammar and Composition (3)
- Religious Studies 301. Hebrew Scriptures (3)
- Religious Studies 320. Judaism (3)
- Religious Studies 325. Christianity (3)
- * Religious Studies 340. Islam (3)
- Religious Studies 350. Dynamics of Religious Experience (3)
- Religious Studies 353. Religion and Psychology (3)
- Religious Studies 354. Religion and Society (3)
- Religious Studies 363. Religion and the Sciences (3)
- * Religious Studies 401. Religions of India (3)
- * Religious Studies 403. Religions of the Far East (3)
- Russian 301. Advanced Grammar and Composition (3)
- ^ Russian 305A. Survey of Russian Literature (3)
- ^ Russian 305B. Survey of Russian Literature (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)
- Television, Film, and New Media 363. International Cinema (3) (Maximum GE credit 3 units)
- Theatre 460A. History of the Theatre (3)
- Theatre 460B. History of the Theatre (3)
- * Women's Studies 340. Women in Modern European History (3)
- * Women's Studies 352. Women in Literature (3)

* Cultural diversity course.

^ Taught in English.

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, they should file an application with the Office of Admissions and Records. Deadlines by which applications must be received in Admissions and Records are published each year in the fall semester Class Schedule. An application fee of \$32.00, which is non-refundable, is required.

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 post-baccalaureate student has been filed with Admissions and Records.

Students not completing requirements must cancel the current application at the earliest possible date and 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 \$16 graduation evaluation and diploma 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 "Election of Regulations for Graduation" 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.

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 students who were graduated at mid-year, those graduating at the end of the spring semester, and undergraduate students who expect to complete requirements for graduation in the summer session. The President of the University, by the authority of the Trustees and on recommendation of the faculty, awards the degrees. Brochures giving details regarding the exercises are mailed to prospective participants in early May.

Summary of Curricula Offered

Majors	Applied Arts and Sciences		Liberal Arts and Sciences	Graduate Curricula		
	BA	BS	BA	MA, MFA	MS	PhD
Accountancy	-	-	-	-	MS	-
# Accounting	-	BS	-	-	-	-
Aerospace engineering	-	BS	-	-	MS	-
Afro-American studies	-	-	BA	-	-	-
American studies	-	-	BA	-	-	-
Anthropology	-	-	BA	MA	-	-
Applied mathematics	-	-	-	-	MS	-
Art	BA	-	BA	MA, MFA	-	-
Asian studies	-	-	BA	MA	-	-
Astronomy	-	BS	BA	-	MS	-
Biology	-	BS	BA	MA	MS	PhD
Business administration	-	-	-	MBA	MS	-
Business administration/Latin American studies	-	-	-	MBA/MA	-	-
Chemical physics	-	BS	-	-	-	-
Chemistry	-	BS	BA	MA	MS	PhD
Child development	-	BS	-	-	MS	-
City planning	-	-	-	-	MCP	-
Civil engineering	-	BS	-	-	MS	-
Classics	-	-	BA	-	-	-
Communication	BA	-	BA	MA	-	-
Communicative disorders	-	-	BA	MA	-	PhD
Comparative literature	-	-	BA	-	-	-
Computational Science	-	-	-	-	MS	-
Computer engineering	-	BS	-	-	-	-
Computer science	-	BS	-	-	MS	-
Counseling	-	-	-	-	MS	-
Creative writing	-	-	-	MFA	-	-
Criminal justice administration	-	BS	-	-	-	-
Criminal justice and criminology	-	-	-	-	MS	-
Dance	-	-	BA	-	-	-
Ecology	-	-	-	-	-	PhD
Economics	-	-	BA	MA	-	-
Education	-	-	-	MA	-	PhD
Electrical engineering	-	BS	-	-	MS	-
Engineering	-	-	-	-	-	PhD
English	-	-	BA	MA	-	-
European studies	-	-	BA	-	-	-
# Finance	-	BS	-	-	-	-
# Financial services	-	BS	-	-	-	-
Foods and nutrition	-	BS	-	-	-	-
French	-	-	BA	MA	-	-
Geography	-	-	BA	MA	-	PhD
Geological sciences	-	BS	-	-	MS	-
German	-	-	BA	-	-	-
Gerontology	-	-	BA	-	-	-
Health science	-	BS	-	-	-	-
History	-	-	BA	MA	-	-
Humanities	-	-	BA	-	-	-
# Information systems	-	BS	-	-	-	-
Interdisciplinary studies	-	-	BA	MA	MS	-
International business	-	-	BA	-	-	-
International security and conflict resolution	-	-	BA	-	-	-
Japanese	-	-	BA	-	-	-
Journalism	-	-	BA	-	-	-
Kinesiology	-	BS	-	-	-	-
Latin American studies	-	-	BA	MA	-	-
Latin American studies/business administration	-	-	-	MBA/MA	-	-
Liberal arts	-	-	-	MA	-	-
Liberal studies	-	-	BA	-	-	-
Linguistics	-	-	BA	MA	-	-
# Management	-	BS	-	-	-	-
# Marketing	-	BS	-	-	-	-
Mathematics	-	BS	BA	MA	-	-
Mathematics and science education	-	-	-	-	-	PhD
Mechanical engineering	-	BS	-	-	MS	-
Mexican American studies	-	-	BA	-	-	-
Microbiology	-	BS	BA	-	MS	-
Music	-	BM	BA	MA	MM	-
Nursing	-	BS	-	-	MS	-
Nutritional sciences	-	-	-	-	MS	-
# Operations management	-	BS	-	-	-	-
Philosophy	-	-	BA	MA	-	-
Physical education	-	-	-	MA	MS	-
Physical science	-	BS	-	-	-	-
Physics	BA	BS	-	MA	MS	-
Political science	-	-	BA	MA	-	-
Psychology	-	-	BA	MA	MS	PhD
Public administration	BA	-	-	-	MPA	-
Public health	-	-	-	-	MPH, MS	PhD
Public health/social work	-	-	-	-	MSW/MPH	-
Radiological health physics	-	-	-	-	MS	-

An emphasis within the B.S. in Business Administration.

Summary of Curricula Offered

Majors	Applied Arts and Sciences		Liberal Arts and Sciences	Graduate Curricula		
	BA	BS	BA	MA, MFA	MS	PhD
# Real estate	-	BS	-	-	-	-
Recreation administration.....	-	BS	-	-	-	-
Rehabilitation counseling.....	-	-	-	-	MS	-
Religious studies	-	-	BA	-	-	-
Russian.....	-	-	BA	-	-	-
Russian and Central European studies.....	-	-	BA	-	-	-
Social science.....	-	-	BA	-	-	-
Social work	-	-	BA	-	MSW	-
Social work/juris doctor	-	-	-	-	MSW/JD	-
Social work/public health	-	-	-	-	MSW/MPH	-
Sociology	-	-	BA	MA	-	-
Spanish.....	-	-	BA	MA	-	-
Special major.....	-	-	-	MA	MS	-
Statistics	-	BS	-	-	MS	-
Television, film, and new media production	-	BS	-	MA	-	-
Theatre Arts.....	BA	-	-	MA, MFA	-	-
Urban studies	-	-	BA	-	-	-
Vocational education	-	BVE	-	-	-	-
Women's studies	-	-	BA	MA	-	-

An emphasis within the B.S. in Business Administration.

Emphases and 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 (BA, Liberal Arts and Sciences)

Emphases:
art history
studio arts

Art (BA, Applied Arts and Sciences)

Emphases:
applied design
environmental design
graphic design
interior design
painting and printmaking
sculpture

Biology (BS, Applied Arts and Sciences)

Emphases:
cellular and molecular biology
ecology
evolution and systematics
marine biology
zoology

Chemistry (BS, Applied Arts and Sciences)

Emphasis:
biochemistry

Classics (BA, Liberal Arts and Sciences)

Emphases:
classical humanities
classical language

Communication (BA, Liberal Arts and Sciences)

Emphases:
advertising
media management
public relations
telecommunications and film

Economics (BA, Liberal Arts and Sciences)

Emphasis:
international economics

Geography (BA, Liberal Arts and Sciences)

Emphases:
methods of geographical analysis
natural resource and environmental
physical geography
urban and regional analysis

Geological Sciences

(BS, Applied Arts and Sciences)

Emphases:
engineering geology
geochemistry
geophysics
hydrogeology
marine geology
paleontology

German (BA, Liberal Arts and Sciences)

Emphasis:
German studies

Health Science (BS, Applied Arts and Sciences)

Emphasis:
community health education

Humanities (BA, Liberal Arts and Sciences)

Emphasis:
European humanities

International Business (BA, Liberal Arts and Sciences)

Emphasis in language:

Chinese
English
French
German
Italian
Japanese
Portuguese
Russian
Spanish

Emphasis in regional/cultural studies:

Africa
Asia
Latin America
Middle East
North America

Russia and Central Europe
Western Europe

Kinesiology (BS, Applied Arts and Sciences)

Emphases:
athletic training
fitness, nutrition, and health
physical education
prephysical therapy

Mathematics (BS, Applied Arts and Sciences)

Emphases:
applied mathematics
computational science
mathematical finance
science

Microbiology (BS, Applied Arts and Sciences)

Emphasis:
medical technology and public health microbiology

Public Administration (BA, Applied Arts and Sciences)

Emphasis:
city planning

Recreation Administration (BS, Applied Arts and Sciences)

Emphases:
outdoor recreation
recreation systems management
recreation therapy

Social Science (BA, Liberal Arts and Sciences)

Emphases:
Africa and the Middle East
environment

Theatre Arts (BA, Applied Arts and Sciences)

Emphases:
children's drama
design and technology for theatre
design for television and film
performance

GRADUATE MAJORS

Applied Mathematics (MS)

Concentration:
mathematical theory of communication systems

Art (MA)

Concentrations:
studio arts
art history

Biology (MA or MS)

Concentrations:
ecology
molecular biology
physiology
systematics evolutionary biology

Business Administration (MS)

Concentrations:
finance
financial and tax planning
human resource management
information systems
international business management
marketing
production and operations management
real estate
taxation
total quality management

Civil Engineering (MS)

Concentration:
environmental engineering

Communicative Disorders (MA)

Concentrations:
speech-language pathology
audiology
education of the deaf
communicative sciences

Education (MA)

Concentrations:
counseling
educational leadership
educational research
educational technology
elementary curriculum and instruction
policy studies in language and cross-cultural education
reading education
secondary curriculum and instruction
special education

Geography (MA)

Concentrations:
natural resources and environmental policy
transportation

Nursing (MS)

Concentrations:
advanced practice nursing of adults and the elderly
community health nursing
nursing systems administration

Psychology (MS)

Concentrations:
applied psychology
clinical psychology (included within the Ph.D. program; not available separately)

Public Administration (MPA)

Concentrations:
city planning
criminal justice administration
public telecommunications administration

Public Health

Concentrations (MPH):
biometry
environmental health
epidemiology
health promotion
health services administration

Concentrations (MS):

environmental health science
industrial hygiene
toxicology

Statistics (MS)

Concentration:
biostatistics

Theatre Arts (MFA)

Concentrations:
acting
design and technical theatre
musical theatre

Credentials Offered**Teaching Credentials**

- Adapted physical education
- Multiple subject
- Multiple subject cross-cultural, language and academic development (CLAD) emphasis
- Multiple subject bilingual cross-cultural language and academic development (B/CLAD) emphasis: Spanish
- Single subject
- Single subject cross-cultural, language, and academic development (CLAD) emphasis
- Single subject bilingual cross-cultural language and academic development (B/CLAD) emphasis: Spanish

Specialist Credentials

- Education specialist for the deaf and hard of hearing
- Reading/language arts
- Resource specialist certificate of competence
- Special education:
 - Early childhood special education
 - Mild/moderate disabilities

Moderate/severe disabilities
Physical and health impairments

Service Credentials

- Administrative
- Child welfare and attendance
- Clinical-rehabilitative
- Health services:
 - school nurse
- Pupil personnel:
 - School counseling
 - School psychology
 - School social work

Minors for the Bachelor's Degree

- Accounting
- Advertising
- Aerospace studies
- African studies
- Afro-American studies
- American Indian studies
- American studies
- Anthropology
- Art
- Art history
- Asian studies
- Astronomy
- Biology
- Business administration
- Chemistry
- Child development
- Chinese
- Classics
- Communication
- Communicative disorders
- Comparative literature
- Computer science
- Computer science
- Dance
- Economics
- Educational technology
- Energy studies
- Engineering
- English
- Environment and society
- European studies
- Finance
- French
- Geography
- Geological sciences
- German
- Gerontology
- Health science
- History
- History of science and technology
- Humanities
- Information systems
- Italian
- Japanese
- Judaic studies
- Journalism
- Latin American studies
- Linguistics
- Management
- Marketing
- Mathematics
- Media management
- Mexican American studies
- Middle East studies
- Military science
- Music
- Naval science
- Oceanography
- Operations management
- Philosophy
- Physical education
- Physics
- Political science

- Portuguese
- Psychology
- Public administration
- Public relations
- Real estate
- Recreation
- Religious studies
- Russian
- Small business management (Imperial Valley Campus only)
- Social work
- Sociology
- Spanish
- Statistics
- Television, film, and new media
- Theatre Arts
- United States-Mexican border studies
- Women's studies

Special Curricula**Preprofessional Curricula**

- Pre dental
- Pre legal
- Pre medical
- Pre veterinary

Military Curricula

- Aerospace studies (AFROTC)
- Military science (ROTC)
- Naval science (NROTC)

Certificate Programs (nondegree)

- Certificate in accounting
- Certificate in applied gerontology
- Certificate in applied linguistics and English as a second language (ESL)
- Certificate in bilingual (Spanish) special education
- Certificate in business administration (Imperial Valley campus only)
- Certificado de Español Comercial
- Certificat pratique de français commercial et économique
- Certificate in children's literature
- Certificate in cross-cultural language and academic development (CLAD)
- Certificate in developing gifted potential
- Certificate in early childhood special education
- Certificate in early intervention
- Certificate in environmental studies
- Certificate in family life education
- Certificate in geographic information science
- Certificate in human services paraprofessional
- Certificate in instructional software design
- Certificate in instructional technology
- Certificate in introductory mathematics
- Certificate in personal financial planning
- Certificate in preventive medicine residency
- Certificate in professional services bilingual/multicultural
- Certificate in public administration (Imperial Valley campus only)
- Certificate in recombinant DNA technology
- Certificate in rehabilitation administration

- Certificate in rehabilitation technology
- Certificate in resource specialist competence
- Certificate in single subject mathematics
- Certificate in court interpreting (Imperial Valley campus only)
- Certificate in supported employment and transition specialist
- Certificate in teaching the emotionally disturbed/behaviorally disordered
- Certificate in technical and scientific writing
- Certificate in translation studies (Spanish)
- Certificate in United States-Mexico border studies
- Certificate in workforce education and lifelong learning

The following non-credit programs are available through Extension only.

- Certificate in community economic development
- Certificate in construction inspection technology
- Certificate in construction practices
- Certificate in consultancy
- Certificate in court interpreting
- Certificate in government contract management
- Certificate in human resource management
- Certificate in legal assistant specialist
- Certificate in medical office procedures
- Certificate in meeting and events planning
- Certificate in negotiation and alternative dispute resolution
- Certificate in operations resource management
- Certificate in occupational health and safety management
- Certificate in school business administration
- Certificate in telecommunications
- Certificate in total quality management
- Certificate in trauma recovery services

Major and Credential Codes*

MAJOR CODE KEY:

- U = Undergraduate
 G = Graduate
 + = Emphasis within another bachelor's degree
 ☉ = Concentration within another master's degree
 # = Specializations within another bachelor's degree

MAJOR	MAJOR CODE
Accountancy	05021 G
+ Accounting	05021 U
Afro-American Studies	22111 U
American Studies	03131 U
Anthropology	22021 U & G
Applied Mathematics	17031 G
Art	10021 U & G
+ ☉ Art History	10031 U & G
+ Graphic Design	10091 U
+ Interior Design	02031 U
Art - MFA	10022 G
Asian Studies	03011 U & G
Astronomy	19111 U & G
Biology	04011 U & G
☉ Botany	04021 G
Business Administration	05011 U & G
Business Administration and Latin American Studies (concurrent program)	49061 G
+ ☉ Chemical Physics	19081 U
Chemistry	19051 U & G
+ Biochemistry	19051 U
Child Development	08231 U & G
City Planning	02061 G
Classics	15041 U
Clinical Psychology	20031 G
Communication	06011 U & G
+ Advertising	06041 U
+ Preadvertising	06040 U
+ Media Management	06032 U
+ Premedia Management	06030 U
+ Public Relations	05992 U
+ Prepublic Relations	05990 U
+ Telecommunications and Film	06033 U
+ Pretelecommunications and Film	06034 U
# Specializations in Communication	15061 U
Communicative Disorders	12201 U & G
Comparative Literature	15031 U
Computational Science	07992 G
Computer Engineering	09094 U
Computer Science	07011 U & G
Counseling	08261 G
Creative Writing	15071 G
☉ Criminal Justice Administration	21051 U & G
Criminal Justice and Criminology	21051 G
Precriminal Justice Administration	21050 U

MAJOR

Dance	10081 U
☉ Ecology	04201 G
Economics	22041 U & G
International Economics Education	22042 U
08011 G	
☉ Counseling	08261 G
☉ Educational Leadership	08271 G
☉ Educational Research	08241 G
☉ Educational Technology	08992 G
☉ Elementary Curriculum & Instruction	08021 G
☉ Policy Studies in Language and Cross-Cultural Education	08994 G
☉ Reading Education	08301 G
☉ Secondary Curriculum & Instruction	08031 G
☉ Special Education Engineering	08081 G
Aerospace Engineering	09021 U & G
Civil Engineering	09081 U & G
Electrical Engineering	09091 U & G
☉ Environmental Engineering	09221 G
Mechanical Engineering	09101 U & G
Engineering Sciences/ Applied Mechanics	09012 G
English	15011 U & G
☉ Entrepreneurship	05997 G
Exercise Physiology	08355 G
European Studies	03101 U
+ ☉ Finance	05041 U & G
+ ☉ Financial Services	05043 U & G
+ ☉ Financial and Tax Planning	05043 G
Foods and Nutrition	13061 U
French	11021 U & G
Geography	22061 U & G
Geological Sciences	19141 U & G
German	11031 U
Gerontology	21043 U
Health Science	12011 U
History	22051 U & G
Humanities	15991 U
☉ Human Resource Management	05151 G
+ ☉ Information Systems	07021 U & G
Interdisciplinary Studies In Three Departments	49993 G
49011 U	
☉ International Business	05131 U & G
☉ Preinternational Business	80000 U
International Security and Conflict Resolution	22103 U
Japanese	11081 U
Journalism	06021 U
Prejournalism	06020 U
Kinesiology	08351 U
Language and Communicative Disorders	12201 G
Latin American Studies	03081 U & G
Liberal Arts	49017 G
Liberal Studies	49015 U
Preliberal Studies	49012 U

MAJOR CODE

MAJOR

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
Mexican American Studies	22131 U
Microbiology	04111 U & G
☉ Molecular Biology	04161 G
Music	10052 U
Music-Performance	10041 U & G
Music	10051 G
Nursing	12031 U & G
Prenursing	12030 U
Nutritional Sciences	22061 G
+ Operations Management	05064 U
Philosophy	15091 U & G
Physical Education	08351 G
Physical Science	19011 U
Physics	19021 U & G
☉ Physiology	04101 G
Political Science	22071 U & G
☉ Production Operations Management	05064 G
Psychology	20011 U & G
Public Administration	21021 U & G
Public Health	12141 G
Radiological Health	
Physics	12251 G
+ ☉ Real Estate	05111 U & G
Recreation Administration	21031 U
Rehabilitation Counseling	12221 G
Religious Studies	15101 U
Russian	11061 U
Russian and Central European Studies	03071 U
Social Science	22011 U
Social Work	21041 U & G
Presocial Work	21040 U
Social Work and Juris Doctor (concurrent program)	21045 G
Social Work and Public Health (concurrent program)	12991 G
Sociology	22081 U & G
Spanish	11051 U & G
Statistics	17021 U & G
☉ 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
☉ Total Quality Management	05072 G
Undeclared	00000 U
Urban Studies	22141 U
Vocational Education	08395 U
Women's Studies	49991 U & G

MAJOR CODE

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

Major and Credential Codes

NUMERICAL LISTING OF MAJOR CODES

MAJOR CODE	MAJOR	MAJOR CODE	MAJOR	MAJOR CODE	MAJOR
00000 U	Undeclared	08395 U	Vocational Education	21021 U & G	Public Administration
02031 U	+ Interior Design	08992 G	¢ Educational Technology	21031 U	Recreation Administration
02061 G	City Planning	08994 G	¢ Policy Studies in Language and Cross-Cultural Education	21040 U	Presocial Work
03011 U & G	Asian Studies			21041 U & G	Social Work
03071 U	Russian and East European Studies	08997 G	Mathematics and Science Education	21043 U	Gerontology
03081 U & G	Latin American Studies			21045 G	Social Work and Juris Doctor (concurrent program)
03101 U	European Studies	09012 G	Engineering Sciences/ Applied Mechanics	21050 U	Precriminal Justice Administration
03131 U	American Studies	09021 U & G	Aerospace Engineering	21051 U & G	¢ Criminal Justice Administration
04011 U & G	Biology	09081 U & G	Civil Engineering	21051 G	Criminal Justice and Criminology
04021 G	¢ Botany	09091 U & G	Electrical Engineering	22011 U	Social Science
04071 G	¢ Systematics Evolutionary Biology (Zoology)	09094 U	Computer Engineering	22021 U & G	Anthropology
04101 G	¢ Physiology	09101 U & G	Mechanical Engineering	22041 U & G	Economics
04111 U & G	Microbiology	09221 G	¢ Environmental Engineering	22042 U	+ International Economics
04161 G	¢ Molecular Biology			22051 U & G	History
04201 G	¢ Ecology	10021 U & G	Art	22061 U & G	Geography
05011 U & G	Business Administration	10022 G	Art - MFA	22071 U & G	Political Science
05021 G	Accountancy	10031 U & G	+ ¢ Art History	22081 U & G	Sociology
05021 U	+ Accounting	10041 U & G	Music – Performance	22103 U	International Security and Conflict Resolution
05022 G	¢ Taxation	10051 G	Music	22111 U	Afro-American Studies
05041 U & G	+ ¢ Finance	10052 U	Music	22131 U	Mexican American Studies
05043 U & G	+ ¢ Financial Services	10071 U & G	Theatre Arts	22141 U	Urban Studies
05043 G	¢ Financial and Tax Planning	10072 G	Theatre Arts – MFA	49011 U	Interdisciplinary Studies– In Three Departments
05061 U & G	+ ¢ Management	10081 U	Dance	49012 U	Preliberal Studies
05064 U	+ Operations Management	10091 U	+ Graphic Design	49015 U	Liberal Studies
05064 G	¢ Production Operations Management	11021 U & G	French	49017 G	Liberal Arts
05072 G	¢ Total Quality Management	11031 U	German	49061 G	Business Administration and Latin American Studies (concurrent program)
05091 U & G	+ ¢ Marketing	11051 U & G	Spanish	49991 U & G	Women's Studies
05111 U & G	+ ¢ Real Estate	11061 U	Russian	49993 G	Interdisciplinary Studies
05131 U & G	¢ International Business	11081 U	Japanese	80000 U	¢ Preinternational Business
05151 G	¢ Human Resource Management	12011 U	Health Science		
05990 U	+ Prepublic Relations	12030 U	Prenursing		
05992 U	+ Public Relations	12031 U & G	Nursing		
05997 G	¢ Entrepreneurship	12141 G	Public Health		
06011 U & G	Communication	12201 U & G	Communicative Disorders Language and Communicative Disorders		
06020 U	Prejournalism	12201 G	Rehabilitation Counseling		
06021 U	Journalism		Radiological Health Physics		
06030 U	+ Premedia Management	12221 G	Social Work and Public Health (concurrent program)		
06031 U & G	Television, Film, and New Media Production	12251 G	Foods and Nutrition		
06032 U	+ Media Management	12991 G	Nutritional Sciences		
06033 U	+ Telecommunications and Film	13061 U	English		
06034 U	+ Pretelecommunications and Film	13061 G	Comparative Literature Classics		
06040 U	+ Preadvertising	15011 U & G	Linguistics		
06041 U	+ Advertising	15031 U	# Communication Specializations		
07011 U & G	Computer Science	15041 U	Creative Writing		
07021 U & G	+ ¢ Information Systems	15051 U & G	Philosophy		
07992 G	Computational Science	15061 U	Religious Studies		
08011 G	Education		Humanities		
08021 G	¢ Elementary Curriculum & Instruction	15071 G	Mathematics-B.A. degree		
08031 G	¢ Secondary Curriculum & Instruction	15091 U & G	Statistics		
08081 G	¢ Special Education	15101 U	Applied Mathematics		
08231 U & G	Child Development	15991 U	Mathematics-B.S. degree		
08241 G	¢ Educational Research	17011 U & G	Physical Science		
08261 G	Counseling	17021 U & G	Physics		
08271 G	¢ Educational Leadership	17031 G	Chemistry		
08301 G	¢ Reading Education	17031 U	Biochemistry		
08351 U	Kinesiology	19011 U	Chemical Physics		
08351 G	Physical Education	19021 U & G	Astronomy		
08355 G	Exercise Physiology	19051 U & G	Geological Sciences		
		19081 U	Psychology		
		19111 U & G	Clinical Psychology		
		19141 U & G			
		20011 U & G			
		20031 G			

CODES FOR CREDENTIALS

CREDENTIAL	CREDENTIAL CODE
Single Subject Instruction	00100
Multiple Subject Instruction	00200
Reading Specialist	00410
Education Specialist for the Deaf and Hard of Hearing	00461
Special Education: Early Childhood Special Education	00435
Special Education: Mild/Moderate Disabilities	00463
Special Education: Moderate/Severe Disabilities	00464
Special Education: Physical and Health Impairments	00462
Administrative Services	00500
Health Services	00600
Counseling (Pupil Personnel Services)	00800
School Counseling	
School Psychology	
Social Work (Pupil Personnel Services)	00800
Clinical–Rehabilitative Services	00900
School Psychology	00950
Adapted Physical Education Emphasis	00980

Courses and Curricula

Courses and Curricula

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 are reserved for graduate courses in certain professional curricula as part of advanced certificate, credential, and licensure programs and are specifically intended for students admitted to the University with post-baccalaureate classified standing. Courses numbered at the 900 level are not applicable to other graduate programs.

Courses numbered 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 professional advancement units offered only through Extension to meet specific academic needs of community groups and are not acceptable toward an undergraduate or graduate degree.

The Unit or Credit Hour

In the listing of courses that follow, figures in parentheses indicate the unit value of the course. One unit or credit hour represents 50 minutes of recitation or lecture, together with the required preparation, or three hours of laboratory work or two hours of activities, each week for a semester.

Prerequisites for Undergraduate Courses

Students must satisfy course prerequisites (or their equivalent) prior to beginning the course to which they are prerequisite. Faculty have the authority to enforce prerequisites listed in the catalog, to evaluate equivalent preparation, and to require proof that such prerequisites/preparation have been completed. Faculty may, during the first week of classes, request students without the prerequisites or equivalent preparation to take formal action to drop the course. Failure to comply will result in a failing grade.

Semester in Which Courses Are Offered

In the listing of courses that follows, Roman numeral I indicates a course offered in the fall semester. Roman numeral II indicates a course offered in the spring semester. An "S" indicates a course offered in the summer.

Following the course title are designations of credit and the semester in which the course is offered.

Examples:

- (3) I Three units. Offered in fall semester.
- (3) II Three units. Offered in spring semester.
- (3-3) Three units each semester. Year course normally beginning in fall semester.
- (3-3) I, II Three units each semester. Year course beginning either semester.

Although the University fully expects to carry out the arrangements planned in the list of courses, it reserves the right to make changes. Classes in which the enrollment does not come up to the minimum number set by the Trustees of The California State University may not be offered or may be postponed.

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. 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 Cr/NC in the course title.

Accountancy

In the College of Business Administration

OFFICE: Student Services 2411
TELEPHONE: (619) 594-5310
FAX: (619) 594-3675
EMAIL: andrew.barnett@sdsu.edu
WWW: <http://www-rohan.sdsu.edu/dept/cbaweb/acct/index.htm>

A member of AACSB—The International Association for Management Education.

Faculty

Emeritus: Brodshatzer, Ferrel, Meier, Meigs, Snudden
Director: Barnett
The Vern E. Odmark Chair in Accountancy: Chow
The PricewaterhouseCoopers Alumni Professor of Accountancy: Capettini
Professors: Bailey, Barnett, Butler, Capettini, Chow, Grudnitski, Lightner, K., Oestreich, Samuelson, Toole, Whittenburg, Williamson
Associate Professors: Houston, Joh, Lightner, S., Venable
Lecturers: Doran, Snyder

Offered by the School

Master of Business Administration.
Master of Science degree in accountancy.
Major in accounting with the B.S. degree in business administration.
Teaching major in business for the single subject teaching credential.
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 has held the position since its creation in 1984. He is widely recognized throughout the country for the breadth of his research and his technical thoroughness.

The PricewaterhouseCoopers Alumni Professor of Accountancy

The PricewaterhouseCoopers Alumni Professor was established in 1993 to recognize innovative excellence in the teaching of accounting. The professorship is designed to enhance the School of Accountancy's ability to attract and retain top-quality accounting educators and scholars.

The professorship is funded by a combination of contributions from the PricewaterhouseCoopers Foundation, the local San Diego office, and SDSU alumni and friends of the school on staff with PricewaterhouseCoopers both locally and nationwide.

Dr. Robert Capettini holds the position. He was centrally involved in creating the new, broad-based, integrated accounting curriculum that was introduced in the fall of 1993.

Admission to the Major

The undergraduate business administration program at San Diego State University is structured such that students desiring a business administration major are first admitted to the prebusiness administration major for their first two years of university work. During these first two years students should complete general education courses and a common core of nine lower division preparation for the business major

courses—Accountancy 201, Financial Accounting Fundamentals; 202, Managerial Accounting Fundamentals; Finance 140, Legal Environment of Business; Economics 101, Principles of Economics (Macro); Economics 102, Principles of Economics (Micro); Information and Decision Systems 180, Principles of Information Systems; Information and Decision Systems 290, Business Communication (not required for accounting majors); Mathematics 120, Calculus for Business Analysis; and Statistics 119, Elementary Statistics for Business. These prerequisite courses may not be taken Cr/NC; the minimum grade in each class is C. All students must have fulfilled the SDSU Mathematics Competency and SDSU Writing Competency requirements and have completed 56 college units.

Supplemental admissions criteria must be met before students may declare an upper division major and be eligible for upper division courses. For current information concerning admissions criteria and procedures, contact the Business Undergraduate Program Office (BA 448).

Business administration majors may not complete a minor in the College of Business Administration.

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 is concerned that each individual upper division student makes reasonable academic progress toward earning a degree. To this end, the College will counsel students who have earned less than a "C" (2.0) average each semester. Further, such students will be warned that continued poor performance may result in their removal from any business major.

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—The International Association for Management Education accredited program. Exceptions require thorough documentation evidencing the above standards.

The Major

The major in accountancy 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.

Accountancy

The School of Accountancy offers two programs at the undergraduate level: The Business Accounting Program and the Professional Accountancy Program.

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 Professional Accountancy Program is for students who plan to pursue professional accounting careers in public accounting firms, corporations, and not-for-profit and governmental organizations. Completion of this program (158 units) results in the awarding of the B.S. in Business Administration (Accounting) and the M.S. in Accountancy when the requirements for each degree have been completed. Application for this program may be made during the semester in which the student completes 95 units and has completed (or is completing) Accountancy 322. In addition to the completed application, admission will be based upon the attainment of above-average grades in all upper division accountancy classes and a strong SDSU overall GPA and GMAT score.

Accounting Major

With the B.S. Degree in Business Administration

(Major Code: 05021)

Preparation for the Major. Accountancy 201 and 202; Economics 101 and 102; Economics 201 or Statistics 119; Mathematics 120; Finance 140; Information and Decision Systems 180. (24 units)

These prerequisite courses may not be taken Cr/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.**

Upper Division Writing Requirement. Information and Decision Systems 390W with a grade of C (2.0) or better.

Business Accounting Program Major. Forty-nine upper division units consisting of Accountancy 321 (or 318 and 319), 322, 421, 422, and three units of upper division accountancy electives (not including Accountancy 325 or 326); Finance 323; Information and Decision Systems 301, 302, and 390W; Management 350; Business Administration 404 or Management 405; Marketing 370; Economics 320 or 321 or Finance 321. A "C" (2.0) average is required in the courses stipulated here for the major. Of the 128 units required for the degree, at least 60 units must be at the upper division level. This includes the 49 units listed above, nine units of upper division General Education, and at least two units of upper division electives, chosen from within or outside of business administration. A minimum of 64 units of coursework applicable to the bachelor's degree must be completed outside the areas of business administration, economics, and statistics. This means that at least three units of electives (upper or lower division) must be completed in areas other than business administration, economics, and statistics. A maximum of six lower division units of accountancy courses may be used to satisfy degree requirements.

Professional Accountancy Program Major. Students must successfully complete 158 units to be awarded first the B.S. degree in Business Administration, Accounting, and then the M.S. degree in Accountancy. Students **MUST** file for graduation and complete the B.S. degree in Business Administration **BEFORE** continuing on to the M.S. degree in Accountancy. Students must apply and be admitted to the M.S. Accountancy program (including completion of the Graduate Management Admissions Test) as listed in the Graduate Bulletin. At least 60 units must be completed at the upper division level. A maximum of six units of lower division accountancy courses may be used to satisfy the requirements for the degrees. No more than 30 units may be in courses numbered 600 and above. Students must achieve a "C" (2.0) average in the following courses: Accountancy 321 (or 318 and 319), 322, 421, 422, and three units of upper division accountancy electives; Finance 323; Information and Decision Systems 301, 302, 390W; Management 350; Business Administration 404 or Management 405; Marketing 370; Economics 320 or 321 or Finance 321. Students must achieve at least a "B" (3.0) average in the classes specified on their official program for the master's degree.

Suggested Course of Study for the Professional Accountancy Program: Students should have completed 67 units, including all lower division General Education and Preparation for the Major, before beginning their upper division work.

JUNIOR YEAR (Fall Semester)

	Units
Accountancy 321	6
Finance 323.....	3
Information and Decision Systems 301	3
Information and Decision Systems 390W.....	4
	16

(Spring Semester)

(Students should take the GMAT early in this semester)
(Apply for Professional Accountancy Program - PAP)

Accountancy 322.....	6
Economics 320 or 321 or Finance 321	3
Information and Decision Systems 302	3
Management 350	3
	15

SENIOR YEAR (Fall Semester)

Accountancy 421	6
General Education Explorations	3
General Education Explorations	3
Marketing 370.....	3
	15

(Spring Semester)

Accountancy 422.....	3
Non-business upper division elective	3
General Education Explorations	3
Management 405 or Business Administration 404.....	3
Upper division accountancy elective.....	3
	15

(Students **MUST** file for graduation and complete the B.S. degree in Business Administration **BEFORE** continuing on to the M.S. degree in Accountancy.)

FIFTH YEAR (Fall Semester)

500-level accountancy elective.....	3
Graduate accountancy elective	3
Graduate accountancy elective	3
Graduate accountancy elective	3
Graduate non-accountancy elective	3
	15

(Spring Semester)

Graduate accountancy elective	3
Graduate accountancy elective	3
Graduate non-accountancy elective	3
Graduate non-accountancy elective	3
Accountancy 790.....	3
	15

Business Major

For the Single Subject Teaching Credential
With the B.S. Degree in Business Administration

All candidates for the single subject teaching credential in business must complete all requirements for the applicable specialization as outlined in this section of the catalog under Policy Studies or Teacher Education. Students must complete the requirements for a major in one of the five departments within the College of Business Administration. In consultation with the single subject credential adviser in the College of Business Administration, undergraduate students must develop programs which fulfill the State credential requirements. All undergraduate majors must demonstrate office skills proficiency. Finance 589, Personal Financial Planning, is required of all teaching credential majors.

Of the 128 units required for the degree, at least 60 units must be at the upper division level.

Student programs must be approved in advance by the College of Business Administration single subject credential adviser.

Accounting Minor

The minor in accounting consists of a minimum of 24 units to include Accountancy 201, 202, 321 (or 318 and 319), 322, Information and Decision Systems 301, and Mathematics 120.

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 or in International Business may not complete a minor in the College of Business Administration.

Students must officially declare the minor before taking any upper division business courses. **Students must meet the prerequisites for the minor in effect at the time that they declare the minor.** The current prerequisites for admission to the accounting minor include completion of the following courses with a grade of C or better: Economics 101, 102, and a three unit course in statistics (Statistics 119 is recommended); completion of the General Education requirements in Communication and Critical Thinking; completion of an additional nine units in the department of the student's major, including at least three units of upper division courses. Students must also meet the GPA requirement in effect at the time that they declare the minor. Contact the Business Undergraduate Program Office (BA 448) for admissions criteria and procedures.

Accounting Certificate

The purpose of the Accounting Certificate is to provide professional and postbaccalaureate certification to accounting and nonaccounting professionals in San Diego.

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, 321* (or 318 and 319), and 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

LOWER DIVISION COURSES

A maximum of six lower division units of accountancy courses may be applied to bachelor's degree requirements for all majors in the College of Business Administration.

201. Financial Accounting Fundamentals (3) I, II, S

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. Preparation requirement for business majors.

202. Managerial Accounting Fundamentals (3) I, II, S

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.

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)

309. The Accounting Profession (1) Cr/NC

Prerequisite: Approved upper division business major, business minor, or other approved major.

Analysis and evaluation of professional opportunities that utilize the accounting and reporting functions.

318. Integrated Accounting IA (3)

Prerequisites: Approved upper division business major, business minor, or other approved major; minimum grade of C in both Accountancy 201 and 202. Completion of General Education requirement in Communication and Critical Thinking. **Proof of completion of prerequisites required:** Copy of transcript.

First half of the material included in Accountancy 321. Not open to students with credit in both Accountancy 325 and 326 or in Accountancy 321. Maximum credit six units for any combination of Accountancy 318, 319, 321.

319. Integrated Accounting IB (3)

Prerequisite: Accountancy 318 with a grade of C or better.

Second half of material included in Accountancy 321. Not open to students with credit in both Accountancy 325 and 326 or in Accountancy 321. Maximum credit six units for any combination of Accountancy 318, 319, 321.

321. Integrative Accounting Topics I (6)

Prerequisites: Admission to Accountancy major, minor, or certificate. Minimum grade of C in both Accountancy 201 and 202. Completion of General Education requirement in Communication and Critical Thinking. **Proof of completion of prerequisites required:** Copy of transcript.

Information and accounting systems to satisfy decision making requirements of managers and external users. Introduction to taxation and tax considerations in selecting the form of organization. Includes topics typically contained in Intermediate Accounting I, Managerial and Cost Accounting, Accounting Information Systems, and Federal Income Tax courses. Not open to students with credit in Accountancy 325 and 326. Maximum credit six units for any combination of Accountancy 318, 319, 321.

322. Integrative Accounting Topics II (6)

Prerequisites: Minimum grade of C in Accountancy 321. Credit or concurrent registration in Information and Decision Systems 390W. **Proof of completion of prerequisites required:** Copy of transcript.

Financial and tax research methods, taxation topics, accounting information systems, financial reporting issues, preparation and use of financial statement information, and accounting issues of not-for-profit organizations. Includes material typically contained in Accounting Information Systems, Accounting for Not-for-Profit Organizations, Federal Income Tax, and Intermediate Accounting II.

325. Intermediate Managerial and Tax Accounting (3)

Prerequisites: Accountancy 202. Approved upper division business major or minor or other approved major. Not open to accounting majors.

Theories, practices, and concepts needed to satisfy decision making requirements of internal users; tax considerations to managerial decision making. May not be taken for credit by accounting majors.

326. Intermediate Financial Accounting (3)

Prerequisite: Accountancy 202. Approved upper division business major or minor or other approved major. Not open to accounting majors.

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.

409. Field Study in Taxation (1) Cr/NC II

Prerequisite: Accountancy 321.

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.)

421. Integrative Accounting Topics III (6)

Prerequisites: Information and Decision Systems 301, 390W; minimum grade of C in Accountancy 322. **Proof of completion of prerequisites required:** Copy of transcript.

Audit of financial statements, consolidated financial reporting issues, and advanced financial accounting topics. Includes material typically contained in Auditing and Advanced Accounting.

422. Integrative Accounting Topics IV (3)

Prerequisites: Information and Decision Systems 301, 390W; minimum grade of C in Accountancy 322. Credit or concurrent registration in Accountancy 421. **Proof of completion of prerequisites required:** Copy of transcript.

Accounting information for managerial performance evaluation, advanced financial reporting issues, and international accounting. Include material typically contained in International Accounting, Advanced Accounting, and Management Control Systems.

496. Selected Topics in Accountancy (1-4) I, II

Prerequisite: Consent of department chair.

Selected areas of concern in accountancy. 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.

498. Investigation and Report (1-3) I, II

Prerequisites: Senior standing and consent of instructor.

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.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

UPPER DIVISION COURSES (Also Acceptable for Advanced Degrees)

501. Advanced Accounting Problems (4) I, II

Prerequisites: Minimum grade of C in Accountancy 322; credit or concurrent registration in Accountancy 421. **Proof of completion of prerequisites required:** Copy of transcript.

Problems involved in partnerships, consignments, consolidations, receiverships, foreign exchange, fund accounting, and other specialized areas.

502. Advanced Managerial Accounting (3)

Prerequisite: Minimum grade of C in Accountancy 322; credit or concurrent registration in Accountancy 421. **Proof of completion of prerequisite required:** Copy of transcript.

Use of accounting information systems for managerial decision making. Introduction to decision-making situations which use accounting information for full or partial resolution. Consideration of uncertainty, decision theory and specific decision contexts.

503. Federal Taxation of Individuals (3) I, II, S

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. (Formerly numbered Accountancy 404.)

504. Federal Taxation of Business Enterprises (3) I, II, S

Prerequisite: Credit or concurrent registration in Accountancy 421 or credit in Accountancy 503.

Taxation of corporations, partnerships, estates, and trusts. Gift and estate tax.

508. Accounting for Not-For-Profit Organizations (3)

Prerequisite: Minimum grade of C in Accountancy 322. **Proof of completion of prerequisite required:** Copy of transcript.

Principles of fund accounting useful in state and local governmental units, hospitals, colleges, and universities. Comparisons with commercial accounting emphasized. Includes study of budgetary accounting, appropriations, encumbrances, internal checks and auditing procedures.

596. Contemporary Topics in Accounting (1-3)

Prerequisites: Minimum grade of C in Accountancy 322, credit or concurrent registration in Accountancy 421. **Proof of completion of prerequisites required:** Copy of transcript.

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. Maximum credit of six units of 596 applicable to a master's degree. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES Refer to Bulletin of the Graduate Division.

Administration, Rehabilitation and Postsecondary Education

OFFICE: 5850 Hardy Avenue, Suite 240

TELEPHONE: (619) 594-6115

In the College of Education

Accredited by the California Commission on Teacher Credentialing and the Council on Rehabilitation Education.

Faculty

Emeritus: Lienert, Stevens, Warburton, Wetherill
Chair: McFarlane
Educational Leadership
Professors: Chamley, Frase, Latta, Merino, Morey, Piland, Pumpian, Streshly
Associate Professor: Downey
Rehabilitation Counseling
Professors: Atkins, Chamley, Jacobs, McFarlane

Offered by the Department

Master of Arts degree in education.
Concentration in educational leadership.
Master of Science degree in rehabilitation counseling.
Bachelor of Vocational Education degree.
Administrative services credentials.
Certificate in rehabilitation administration (refer to *Bulletin of the Graduate Division*).

Bachelor of Vocational Education Degree

(Major Code: 08395)

Instructors of Occupational Education are encouraged to complete the B.V.E. and to enroll in the program leading to the Master of Arts in Education with a concentration in educational leadership. For further information, students are advised to consult with the Postsecondary Education Coordinator, College of Education.

The Bachelor of Vocational Education degree is designed primarily for instructors who are **teaching in a vocational education program** either in the secondary school or in postsecondary education programs and qualify for an official evaluation (under provisions of the Swan Bill) through the State Board of Vocational Examiners in Sacramento. To qualify for the evaluation, the requirements of the State Education Code, Section 89223, must be met. This regulation stipulates a minimum period of vocational teaching experience amounting to 1,620 clock hours in a full-time position or 1,000 clock hours in an approved trade technical extension class.

The individual desiring to secure the B.V.E. degree should follow the basic pattern set down in the following steps:

1. The individual must have an Associate of Arts degree or 60 units. (This should include, if possible, the 40 lower division units of general education required for the bachelor's degree from SDSU. The additional nine upper division units required for General Education must be completed at SDSU.) 70 units maximum
2. The individual must apply for evaluation of work experience (Swan Bill). Applicants should apply to the Board of Examiners for Vocational Teachers, Bureau of Industrial Education, State Education Bldg., 721 Capitol Avenue, Sacramento, California. These units count toward the major and are classified as upper division units. (See Postsecondary Education Program Coordinator for assistance and application forms.) 40 units maximum

3. The individual must take the following professional occupational teacher education courses:
ARP 380, 381, 382, and 565. 11-13 units maximum
4. The individual must receive credit for the required number of upper division courses to complete the Bachelor of Vocational Education degree graduation requirements. This includes those given in item 2. 40 units
5. The individual must satisfy all other graduation requirements, including competencies, upper division writing requirement, grade point average, residency, etc.
6. The individual must see an adviser in the area of the major to arrange a program for completion of coursework. A series of elective courses that will support the professional responsibilities of the candidate will be recommended. Furthermore, 30 units must be in residency at SDSU, of which 24 must be upper division.

Total 124 units

Courses

GENERAL

UPPER DIVISION COURSES (Intended for Undergraduates)

397. Problems in Education (Credit to be arranged) I, II (Offered only in Extension)

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.

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. (Formerly numbered Educational Technology and Librarianship 496.)

499. Special Study (1-3) I, II

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)

584. Introduction to Rehabilitation Process (3)

Background and legislation related to vocational rehabilitation, client services, role and function of rehabilitation counselor as a professional. Orientation to community rehabilitation agencies.

Administration, Rehabilitation and Postsecondary Education

585. Applications of Rehabilitation Technology (3)

Prerequisite: Admission to rehabilitation counseling program or consent of instructor.

Provide rehabilitation professionals with knowledge and skills to assess assistive technology needs of individuals with disabilities and match those needs with appropriate adaptations, equipment, and/or resources to expand employment and related quality of life opportunities.

596. Topics in Administration, Rehabilitation and Postsecondary Education (1-3)

Selected problems in administration, rehabilitation and postsecondary education. 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. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

Educational Leadership

UPPER DIVISION COURSES

(Intended for Undergraduates)

380. Principles of Adult and Vocational Education (3) I, II, S

Principles, practices, scope, and functions of adult and vocational education.

381. Developing Adult and Vocational Education (3) I, II, S

Needs assessment, task analysis, formulation of objectives, lesson plans, instructional techniques, and evaluation in adult and vocational settings.

382. Directed Teaching (2-4) Cr/NC I, II, S

Prerequisite: Administration, Rehabilitation and Postsecondary Education 380, 381, or 565.

Systematic observation, participation, and teaching under supervision in an occupational subject matter area. Application to take this course must be made in preceding semester.

UPPER DIVISION COURSE (Also Acceptable for Advanced Degrees)

565. Psychological Foundations of Adult and Vocational Education (3) I, II, S

Prerequisite: Administration, Rehabilitation and Postsecondary Education 380 or 381.

Learning processes of adult and vocational education students in relationship to theories of learning and methods of teaching.

GRADUATE COURSES Refer to Bulletin of the Graduate Division.

Aerospace Engineering and Engineering Mechanics

OFFICE: Engineering 308
TELEPHONE: (619) 594-6074

In the College of Engineering

The undergraduate degree in Aerospace Engineering is accredited by the Accreditation Board for Engineering and Technology, Inc.

Faculty

Emeritus: Dharmarajan, Faulkner, Shutts
Chair: Katz
Professors: Conly, Katz, Narang, Nosseir, Pierucci, Plotkin, Wang

Offered by the Department

Doctor of Philosophy degree in applied mechanics.
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 Accreditation Board for Engineering and Technology, Inc., 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 twelve units may be used for General Education credit from any one department or academic unit.

I. Communication and Critical Thinking: 9 units

1. Oral Communication (3 units)
2. Composition (3 units)
3. Intermediate Composition and Critical Thinking (3 units)

II. Foundations: 29 units

- A. Natural Sciences and Quantitative Reasoning (17 units):
1. Physical Sciences (11 units)
Engineering students will take Chemistry 200 which includes a laboratory (5 units).
Physics 195 (3 units)
Physics 196 (3 units)
 2. Life Sciences (3 units)
 3. Laboratory (satisfied under A.1. above)
 4. Mathematics/Quantitative Reasoning
Engineering students will take Mathematics 150, 3 units applicable to General Education.
- 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 in General Education, excluding courses numbered 500 and above.

IV. Explorations: 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.
- B. Upper division Humanities (3 units from a department not selected in A above.)
- C. Upper division Social and Behavioral Sciences (3 units)

The Major

The Department of Aerospace Engineering and Engineering Mechanics offers a rigorous and balanced education which includes the study of aerodynamics, aerospace structures, propulsion, flight mechanics and vehicle design. The goal of this program is to create professional aerospace engineers with an understanding of the physical fundamentals underlying atmospheric and space flight, and with the capability of applying this knowledge for research, analysis, and design purposes. Moreover, the physical background and design synthesis that are characteristic of an aerospace engineering student's education also prepare the student to work productively in other fields such as energy, transportation, and ocean engineering.

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, the airlines, 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.

Aerospace Engineering Major

With the B.S. Degree (Major Code: 09021)

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 students' choice of elective courses and area of specialization must be made in consultation with their adviser and documented by the filing of an approved master plan during the first semester of their junior year.

Upper Division Writing Requirement. Departmental screening in Aerospace Engineering 303, or passing the University Writing Examination, or completing one of the approved writing courses with a grade of C (2.0) or better.

NOTE: See following page for recommended sequence of courses for the major in aerospace engineering.

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Units</i>	<i>Spring Semester</i>	<i>Units</i>
Chem. 200, General Chemistry	5	Phys. 195, Principles of Physics	3
Math. 150, Calculus I	5	Math. 151, Calculus II	4
General Education	6	ME 190, Engineering Drawing	2
AE 123, The Aerospace Engineer	1	Engr. 120, Engr. Problem Analysis	2
		General Education	6
	17		17

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Units</i>	<i>Spring Semester</i>	<i>Units</i>
Math. 252, Calculus III	4	Phys. 197, Principles of Physics	3
EM 200, Statics	3	EE 204, Principles of Elec. Engr.	3
General Education	9	EM 220, Dynamics	3
Phys. 196, Principles of Physics	3	Engr. 280, Methods of Analysis.....	3
		General Education	3
		ME 260, Engineering Materials	3
	19		18

JUNIOR YEAR

<i>Fall Semester</i>	<i>Units</i>	<i>Spring Semester</i>	<i>Units</i>
ME 352, Thermodynamics and Heat Transfer	3	Engr. 510, Methods of Analysis	3
AE 301, Low Speed Aerodynamics	3	AE 302, High Speed Aerodynamics	3
CEE 301, Intro. to Solid Mechanics	3	AE 303, Experimental Aerodynamics	2
CEE 302, Solid Mechanics Lab.	1	AE 310, Aerospace Struc. Anal.	3
EM 340, Fluid Mechanics	3	AE 320, Aerospace Flight Mech.	3
EM 341, Fluid Mechanics Lab.	1	General Education	3
General Education	3		
	17		17

SENIOR YEAR

Fall Semester—All Specializations

	<i>Units</i>
AE 403, Aerosp. Engr. Senior Project	3
AE 410, Aerospace Struc. Dynamics	3
AE 430, Aircraft Propulsion Systems	3
AE 440, Aircraft Stab. and Control I	3
AE 460A, Aerosp. Engr. Applications	2
American Institutions	3
	17

Spring Semester—According to Specialization

Aerodynamics	<i>Units</i>	Aerospace Structures	<i>Units</i>	Propulsion & Flight Mechanics	<i>Units</i>
AE 460B, Aerosp. Engr. Applications	3	AE 460B, Aerosp. Engr. Applications.....	3	AE 460B, Aerosp. Engr. Applications.....	3
American Institutions.....	3	American Institutions.....	3	American Institutions.....	3
General Education	3	General Education	3	General Education	3
<i>Choose any two courses:</i>		<i>Choose any two courses:</i>		<i>Choose any two courses:</i>	
AE 530, Rocket & Space Propulsion	3	AE 540, Arcrft. Stability & Control II.....	3	AE 520, Int. Aerospace Flight Mech.	3
AE 550, Viscous Flow	3	EM 510, Fin. Ele. Meth. Aero. Struc.	3	AE 530, Rocket & Space Propulsion	3
EM 510, Fin. Elem. Meth. Aero. Struc.	3	EM 530, Composite Struc. Analysis	3	AE 540, Arcrft. Stability & Cntrl. II	3
	15		15		15

Other electives may be substituted with permission of the adviser and department chair.

Courses

LOWER DIVISION COURSE IN AEROSPACE ENGINEERING

123. The Aerospace Engineer (1)

Introduction to professional aerospace engineering. Emphasis on aeronautics and astronautics.

UPPER DIVISION COURSES IN AEROSPACE ENGINEERING (Intended for Undergraduates)

301. Low Speed Aerodynamics (3)

Prerequisite: Credit or concurrent registration in Engineering Mechanics 340.

Subsonic flow, airfoil and wing theory, experimental characteristics of wing sections, high lift devices.

302. High Speed Aerodynamics (3)

Prerequisites: Aerospace Engineering 301 and Mechanical Engineering 352.

Supersonic flow, two- and three-dimensional compressible flow, wings in compressible flow, two- and three-dimensional method of characteristics, transonic flow.

303. Experimental Aerodynamics (2)

One lecture and three hours of laboratory.

Prerequisites: Engineering Mechanics 341 and credit or concurrent registration in Aerospace Engineering 301. **Proof of completion of prerequisite required for the following:** To be eligible for the departmental upper division writing test in this class, students must have completed 60 units, fulfilled the Writing Competency requirement, and completed the General Education requirement in Written Communication. Test scores or verification of exemption; copy of transcript or enrollment confirmation.

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.

310. Aerospace Structural Analysis (3)

Prerequisite: Civil and Environmental Engineering 301.

Methods of static structural analysis of problems encountered in flight of aerospace vehicles.

320. Aerospace Flight Mechanics (3)

Prerequisites: Engineering Mechanics 220 and Engineering 280.

Aerodynamics and dynamics of ballistic missiles; guidance systems; orbits and space trajectories; effects of aerodynamics, mass, rotation and shape of the earth on ballistic and space trajectories. Computer programming and problem solutions will be emphasized.

403. Aerospace Engineering Senior Project (3)

One lecture and six hours of laboratory.

Prerequisites: Aerospace Engineering 302, 303, Engineering Mechanics 340.

Design and build an aerospace project, conduct experimental measurements, perform analyses of measured data.

410. Aerospace Structural Dynamics (3)

Prerequisites: Credit or concurrent registration in Aerospace Engineering 310.

Methods of structural dynamic analysis of problems encountered in aerospace vehicles.

430. Aircraft Propulsion Systems (3)

Prerequisite: Aerospace Engineering 302 or Mechanical Engineering 450.

Theory and performance characteristics of aircraft propulsion systems including reciprocating engines, turbojets, ramjets, etc.

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.

460A. Aerospace Engineering Applications (2) I

Six hours of laboratory.

Prerequisites: Aerospace Engineering 302, 303 and 310.

Student projects in aerospace design.

460B. Aerospace Engineering Applications (3) II

One lecture and five hours of design activity.

Prerequisite: Aerospace Engineering 460A.

Student projects in aerospace design.

480. Aeroelasticity and Acoustics (2)

Prerequisites: Aerospace Engineering 302 and 410.

Theory of fluid-structure interaction. Flutter phenomena. Buffeting. Oscillating airfoils in compressible flow. Theory of acoustics. Acoustic radiation. Effect of fluid motion.

496. Advanced Aerospace Engineering Topics (1-3) I, II

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 and 499.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units for any combination of Aerospace Engineering 496 and 499.

UPPER DIVISION COURSES IN AEROSPACE ENGINEERING

(Also Acceptable for Advanced Degrees)

520. Intermediate Aerospace Flight Mechanics (3)

Prerequisite: Aerospace Engineering 320.

A continuation of Aerospace Engineering 320 to include orbit determination techniques, general and special perturbations, artificial satellites, rocket dynamics and transfer orbits, earth-moon trajectories, and interplanetary trajectories.

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.

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.

550. Viscous Flow (3)

Prerequisites: Credit or concurrent registration in Engineering Mechanics 340, and Engineering 510.

Kinematics of fluid motion. Conservation of mass, momentum, and energy. Navier-Stokes equations; exact solutions. Boundary layer approximations, turbulent flow.

596. Advanced Aerospace Engineering Topics (3)

Prerequisite: Consent of instructor.

Modern developments in aerospace engineering. See Class Schedule for specific content. Maximum credit of six units for any combination of Aerospace Engineering or Engineering Mechanics 496, 499, and 596 applicable to a bachelor's degree. Maximum combined credit of six units of Aerospace Engineering or Engineering Mechanics 596 and 696 applicable to a 30-unit master's degree.

**LOWER DIVISION COURSES IN
ENGINEERING MECHANICS**

200. Statics (3) I, II

Prerequisites: Physics 195 and credit or concurrent registration in Mathematics 151. **Proof of completion of prerequisites required:** Copy of transcript or enrollment confirmation.

Force systems, equilibrium, structures, distributed forces, friction, virtual work, moments of inertia, vector algebra.

202. Mechanics for Electrical Engineers (3) I, II

Prerequisites: Physics 195 and credit or concurrent registration in Mathematics 151.

Essentials of mechanics of particles and rigid bodies, for engineering applications. Emphasis on particle dynamics. Intended for Electrical Engineering majors. Not open to students with credit in Engineering Mechanics 200 or 220.

220. Dynamics (3) I, II

Prerequisite: Engineering Mechanics 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.

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 IN
ENGINEERING MECHANICS
(Intended for Undergraduates)**

340. Fluid Mechanics (3) I, II

Prerequisites: Engineering Mechanics 220 or 202; and credit or concurrent registration in 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.

341. Fluid Mechanics Laboratory (1) I, II

Three hours of laboratory.

Prerequisite: Credit or concurrent registration in Engineering Mechanics 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.

496. Advanced Engineering Mechanics Topics (1-3) I, II

Prerequisite: Consent of instructor.

Modern developments in engineering mechanics. See Class Schedule for specific content. Maximum credit six units for any combination of Engineering Mechanics 496, 499, and 596.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units for any combination of Engineering Mechanics 496, 499, and 596.

**UPPER DIVISION COURSES IN
ENGINEERING MECHANICS
(Also Acceptable for Advanced Degrees)**

510. Finite Element Methods in Aerospace Structures (3)

Prerequisite: Aerospace Engineering 410.

Static and dynamic analysis of aerospace structures utilizing finite element methods.

530. Composite Structural Analysis (3)

Prerequisites: Engineering 280 and Civil and Environmental Engineering 301.

Strength of composite materials; lamination theory; strength analysis of laminates; bending, buckling, and vibration of composite plates.

596. Advanced Engineering Mechanics Topics (1-3)

Prerequisite: Consent of instructor.

Modern developments in engineering mechanics. See Class Schedule for specific content. Maximum credit of six units for any combination of Engineering Mechanics 496, 499, and 596 applicable to a bachelor's degree. Maximum combined credit of six units of Engineering Mechanics 596 and 696 applicable to a 30-unit master's degree.

**GRADUATE COURSES IN AEROSPACE ENGINEERING
AND ENGINEERING MECHANICS**

Refer to Bulletin of the Graduate Division.

Aerospace Studies

In the College of Professional Studies and Fine Arts

OFFICE: Exercise and Nutritional Sciences 385

TELEPHONE: (619) 594-5545

Faculty

Chair: Borland

Professor: Borland

Assistant Professors: Lambert, Leos, Trout, Reppart

Offered by the Department

AFROTC curriculum.

Minor in aerospace studies.

AFROTC Curriculum

The department offers a four- or two-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 \$150 allowance 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 military bases.

Either a four- or five-week Field Training camp is required for all students during the summer between the sophomore and junior years. The four-week camp is for students who have completed all AFROTC lower division courses with a grade of "C" or better in each course and for those with prior military service. 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 (AS100/200) classes. However, an orientation program, held just prior to the start of the fall 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 (AS300/400) lead to the commission as a second lieutenant and any student may 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 depart-

ment to obtain enrollment procedures. Veterans who can be commissioned by age 35 are also eligible for the program.

Aerospace Studies Minor

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

LOWER DIVISION COURSES

91A-91B. Leadership Laboratory (1-1) Cr/NC

One hour and forty-five 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 behaviour, 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.

92A-92B. Leadership Laboratory (1-1) Cr/NC

One hour and forty-five 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.

93A-93B. Leadership Laboratory (1-1) Cr/NC

One hour and forty-five 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.

94A-94B. Leadership Laboratory (1-1) Cr/NC

One hour and forty-five 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.

100A-100B. The Air Force Today (1-1)

Meets one and one-half hours 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.

200A-200B. The Air Force Way (1-1)

Meets one and one-half hours 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 power and preparation for field training. Techniques for improving communication, discussion of Air Force heritage, leadership basics, Air Force quality, ethics, values, problem solving, and teamwork.

233. Field Training Unit (2-3) Cr/NC I

Required for advanced cadets, military orientation and flight familiarization. Credit granted for four or five-week field training camp on basis of individual student application with approval of Aerospace Studies department chair.

UPPER DIVISION COURSES

**(Intended for successful AFROTC applicants
or for those with special permission)**

300A-300B. Air Force Leadership and Management (3-3)

Air Force leadership and management principles. Quality management, process improvement, subordinate leadership, ethics, standards of conduct, and officer values. Improving writing and briefing skills.

400A-400B. Preparation for Active 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.

499. Special Study (1-3) I, II

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

Africana Studies

In the College of Arts and Letters

OFFICE: Adams Humanities 3131

TELEPHONE: (619) 594-6531

Faculty

Chair: Toombs

Professors: Chambers, Kornweibel

Associate Professors: Cornwell, Toombs, Weber

Assistant Professor: Livingston

Offered by the Department

Major in Afro-American studies with the B.A. degree in liberal arts and sciences.

Minor in Afro-American studies.

The Major

Africana studies offers a broad, interdisciplinary program. The curriculum is designed to study a variety of subjects pertaining to the Africana experience. It is concerned with strengthening links between the needs of 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.

Afro-American Studies Major

With the B.A. Degree in Liberal Arts and Sciences

(Major Code: 22111)

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 101A, 101B, 102, 170A; 170B or 250. (15 units)

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 24 upper division units to include twelve units selected from one of the following areas and six units from each of the two remaining areas. 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.

Sociology and Psychology: Africana Studies 330, 331, 341, 360*, 445, 448, 451, 452, 453.

Humanities: Africana Studies 362, 363, 365, 385, 460, 461, 462, 463, 480, 485.

History and Political Science: Africana Studies 320, 321, 322, 325, 380, 420, 470, 471A, 471B, 472.

* Additional prerequisite required.

Afro-American Studies Minor

The minor in Afro-American studies consists of a minimum of 18 units in Africana Studies, of which 12 units must be upper division, to include six units selected from the courses for preparation for the major, six units selected from one of the three areas of the major, and three units from each of the remaining areas.

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

LOWER DIVISION COURSES

101A. Introduction to Africana Studies: Social and Behavioral Sciences (3)

Interdisciplinary introduction of African American thought and behaviour. 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.

101B. Introduction to Africana Studies: Humanities (3)

Interdisciplinary introduction to African American history, literature, other arts and religion. Subject areas include methodology and theoretical perspectives of Africana studies.

102. Afro-American Lifestyles (3) I, II

Afro-American lifestyles in the past, present, and future. Examination of contemporary problems, their roots and their effects on twentieth century America.

120. Composition (3)

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 Cr in Rhetoric and Writing Studies 92A or 92B or 97A or 97B, or notification from the Department of Rhetoric and Writing Studies.

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 Chicana and Chicano Studies 111B or Linguistics 100 or Rhetoric and Writing Studies 100 or higher-numbered composition course.

140. Oral Communication (3) I, II

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.

170A-170B. Afro-American History (3-3) I, II

American history from a Black perspective. These courses satisfy the graduation requirement in American Institutions.

200. Intermediate Expository Writing and Research Fundamentals (3)

Prerequisites: Satisfaction of the English Placement Test and Writing Competency requirements; and Africana Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100 or Rhetoric and Writing Studies 100. **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 Linguistics 200 or Rhetoric and Writing Studies 200.

250. Psychology of Blackness (3)

Facts, principles, and concepts which are basic to understanding human behavior. An analysis of the psychological motivations and behavioral responses of and toward Afro-Americans.

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)

320. Politics and Economics of Black Urban Development (3)

Prerequisite: Africana Studies 101A or completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors.

Political economy of urban growth, development, and redevelopment examined in historical and contemporary contexts. Focus on race

and class inequality and conflict; effectiveness of public and private sector decisions and programs; evolution of African American urban poor and their communities.

321. Black Political Participation in America (3)

Prerequisites: Africana Studies 101A or 102 or 170A or 170B. Completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors.

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.

322. African American Political Thought (3)

Prerequisite: Africana Studies 101A or completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors.

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.

325. Public Policy and Afro-American Community (3) II

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

Impact of public policy on Afro-American community: theory and practice of policy formulation, implementation, evaluation, and modification for specific problems in Afro-American community; roles of governmental officials, administrative arrangements, organizational processes, and community groups in policy making.

330. Black Child Development (3) II

Attitudes, needs and problems of the Afro-American child with emphasis on new approaches and insights into the development of positive changes for the child's growth and development.

331. The Black Family (3) I

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

332. Black Women: Myth and Reality (3)

Prerequisites: Africana Studies 101A or 101B and 102.

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

341. Cultural Patterns and African American Identity (3)

Prerequisites: Africana Studies 101A or completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors.

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

360. Communications and Community Action (3)

Prerequisite: Africana Studies 140 (field assignments are a major part of this course).

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

362. Rhetoric of Black America (3)

Prerequisite: Three units of Afro-American history or communications.

Rhetoric of Black Americans from David Walker to the present, role rhetoric has played in history of Black people and an analysis of Black audience in terms of the Black experience.

363. Sociocultural Analysis of Black Languages (3)

Prerequisite: Three units in Africana Studies.

Social and cultural functions of Black languages, verbal and non-verbal, in Afro-American life, and their profound impact on larger society. Also, a probe into issues concerning validity of Black English.

365. African American Literature (3)

Prerequisite: Africana Studies 101B or completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

Early and contemporary writing by African American authors. Issues of literary form, canon formation and sociopolitical impact of the literature upon African American culture.

380. Blacks in the American Justice System (3)

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

Into interpretation and application of constitutional principles and judicial decisions to political and social problems faced by Afro-Americans.

385. African American Music (3)

Prerequisite: Africana Studies 101B or completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

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.

420. Afro-Americans and the Politics of Urban Education (3)

Prerequisites: Africana Studies 101A or 102. Completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors.

Struggle against Afro-American subordination and complexities, contradictions, and dilemmas of formulating and implementing quality education and equal opportunity policies. Interaction between politics and education during eras of machine, reform, and postreform politics.

445. Ethnicity and Social Psychology (3)

Prerequisites: Africana Studies 101A or 250. Completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors.

Analysis of major social psychological theories specifically focusing on how these theories relate to minority attitude/value formation and group behavior. Strategies for resolving social issues.

448. Black and Non-Black Interpersonal Relations (3)

Cognitive and experiential examination of contemporary issues around Black and non-Black interpersonal relations. Authenticity in relationships, interracial trust, personal development, conflict resolution, and proactive belief systems. Central aim to assist Blacks and non-Blacks to facilitate communication.

451. Black Consumer Psychology (3)

Prerequisite: Africana Studies 250.

Attitude values and decision making of Black people as consumers. Laws and techniques of manipulating consumers.

452. Race Relations Strategies (3)

Prerequisite: Africana Studies 101A or 102 or 250.

Systematic inquiry into contemporary strategies and systems employed to ease racial tensions. Trends and approaches in military, religious, economic, educational, and other social institutions examined, focusing on those that offer most promise in terms of facilitating racial harmony.

453. Issues in Mental Health: A Multicultural Perspective (3)

Prerequisite: Africana Studies 250.

Examination of multicultural mental health issues. Institutionalization, treatment, social policy funding, prevention, insurance, and community programs will be covered. Relevant research literature will be examined.

460. Black Images in Western Literature (3)

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

Study of how the image of the Black has been portrayed in Western (white) literature and the attitudes and images of non-Black writers towards Blacks.

461. Studies in African American Literature (3)

Prerequisite: Africana Studies 101B.

Focused studies in African American literature. Analysis of themes, techniques, etc., in fiction, poetry and/or drama.

462. The Harlem Renaissance (3)

Black literature of the 1920s from literary, historical, sociological and cultural perspectives.

463. Black Literatures of the World (3)

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

Afro-American literature in context of world literatures by Blacks. Cross-cultural influences between Africa and the Americas.

464. Caribbean Literature (3)

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

Political, religious, and musical paradigms in writing from 1900 to present. Politico-religious movements and related art forms (i.e. Rastafarian Reggae, Dub Poetry).

470. Comparative History: Afro-American and African Heritage (3)

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

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

471A. Black History, 1492-1877 (3) I

Afro-Americanization and African survivals in the U.S.; origins and development of slavery; growth of free Black communities; anti-slavery movements and Black nationalism; slavery's end and dawn of freedom.

471B. Twentieth Century Black History (3) II

History of social movements and institutions from 1890 to the present. Focus on both leadership and life of the masses.

472. Comparative Slavery (3)

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

Comparative history of enslavement of Blacks throughout western hemisphere. Uses United States as baseline. Further comparisons to ancient Mediterranean, African, and Middle Eastern societies; Nazi Germany; contemporary Asian cultures.

480. History of Afro-American Jazz (3)

Prerequisite: Africana Studies 101B.

Historical development of jazz from its beginnings to the present, based on the ability to identify people, discuss musical styles and events, and to relate these factors to the life of the times.

485. Blacks in the Arts (3)

Prerequisite: Africana Studies 101B or 102.

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.

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.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

American Indian Studies

In the College of Arts and Letters

OFFICE: Adams Humanities 3104
TELEPHONE: (619) 594-6991
FAX: (619) 594-2646

Faculty

Chair: Parker
Professors: Kilpatrick, Parker
Adjunct: Cayleff, Colston, Cooper, Cox, Johnson, Rodriguez,
Shipek, Watson, White

Offered by the Department

Minor in American Indian studies.

The Minor

A minor in American Indian studies provides students with a liberal education which focuses on cultural diversity. Individuals will attain competency in a broad understanding of the human condition which will relate closely to the areas of public relations, cultural pluralism, and race relations. Students pursuing careers in mass media, politics, journalism, and education will find that a minor in American Indian studies opens a new spectrum of human understanding and critical analysis of professional life.

The American Indian studies program focuses on individual elements that comprise the native American cultures. Using literature, art, history and politics as touchstones, students come to understand the individual as well as tribal character of the Indian peoples. The academic area also draws 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 have also found positions in programs for Indian tribes and 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.

American Indian Studies Minor

The minor in American Indian studies consists of a minimum of 15 units to include American Indian Studies 110; 12 of the 15 units must be in upper division courses selected from American Indian studies or other appropriate departments (e.g., anthropology or history) 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

LOWER DIVISION COURSES

110. American Indian Heritage (3) I, II

Major American Indian themes, beliefs, and practices and their impact on Western civilization through institutions, art, literature, philosophy, and religion.

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)

300. American Indian Oral Literature (3) I

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

Pre-twentieth century American Indian oral and symbolic traditions including creation and origin legends, coyote stories, ceremonial songs, oratory, and memoirs.

303. American Indian Women in American Society (3)

Historical and contemporary analysis of the role of Indian women in both Indian and dominant society.

320. American Indians in Contemporary Society (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations 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.

400. The American Indian Political Experience (3)

Social and political response to dominant group policies by the American Indian as compared to other minority groups.

420. Indian Peoples of California (3)

Indian peoples of California. Their histories and cultures from oral traditions to contemporary issues. Focus on selected Indian tribes and communities.

425. Indians of the Plains (3)

Indian peoples of the Plains. Their histories and cultures from oral traditions to contemporary issues. Focus on selected Indian tribes and communities.

430. American Indian Poetry and Fiction (3) II

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

Contemporary American Indian poetry and fiction explored in works of Welch, Ortiz, Momaday, Silko, Deloria, Allen, Erdich, and others.

435. Indians Through Film and Television (3)

Images of Indians in film and television. Impact of movies and television on popular concepts of Indians. Films viewed in class.

440. American Indian History (3) I, II

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

Historical analysis of Indian-White contact. Emphasis on the impact of historical events upon the various cultures.

470. Roots of Indian Tradition (3) I, II

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

Spirits, prophecies, and renewals of the Indian way compared through symbols and ceremony. Religions will be surveyed as they have been influenced by foreign elements and philosophies. Influences on values and tribalism as reflected through symbols and other measures.

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.

499. Special Study (1-4)

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

American Studies

In the College of Arts and Letters

OFFICE: Adams Humanities 4207
TELEPHONE: (619) 594-5262
FAX: (619) 594-2210
EMAIL: pmason@mail.sdsu.edu

Faculty

The American studies program is administered through the American Studies Committee. Faculty assigned to teach courses in American studies are drawn from departments in the College of Arts and Letters.

Chair: DuFault (History)

Adviser: Gregory (English)

Committee: Colquitt (English), Deutsch (Child and Family Development), Donahue (Linguistics), DuFault (History), Ford (Geography), Gregory (English), Griswold (English), Huckle (Women's Studies), Koolish (English), Kornfeld (History), Kornweibel (Africana Studies), Kushner (History), Lewin (Political Science), McCaffery (English and Comparative Literature), Meadows (Music), Real (Communication), Samovar (Communication), Strom (Teacher Education), Vartanian (History), Wall (English)

Offered by American Studies

Major in American studies with the B.A. degree in liberal arts and sciences.

Minor in American studies.

The Major

American studies is an interdisciplinary program designed to bridge the division of knowledge into discrete disciplines. Each of the four program clusters combines American studies core courses, which relate materials and methods from various disciplines, with upper division courses from several disciplines. The courses are selected to focus on and bring into interrelation one group of American people, one social or cultural process, one place and one period.

The special integrating work in the student's major program is a series of special studies under the direction of members of the American studies faculty in which the student produces a paper or project interrelating the four focuses of his or her studies. The paper or project must make use of two or more disciplines' analyses of the same material. Because American studies finds its center in the concept of culture, the paper or project must deal at least in part with the cultural connections among the four subjects of focus.

With the approval of the American studies adviser, the student may design a program cluster comparable in format to those listed in this catalog but tailored to his or her individual interests.

The minor in American studies is open to all students and is of special interest to international students. The coursework is intended to provide a broad perspective of the American culture - the heritage, the ideas and dreams, and the failures as well as accomplishments.

The flexibility of this interdisciplinary major allows graduates to enter a broad range of career areas, including journalism, law, law enforcement, environmental planning, teaching, archival work, museum curatorship, international business, librarianship or government service. Competencies gained by the American studies major provide a sound basis for entering graduate study in a variety of areas. Many universities have graduate programs in American studies. Graduate work may be required for entrance into a specific career field.

Business and teaching professions in foreign countries welcome American studies majors who can help them understand the way business and social life is conducted in the United States.

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.

American Studies Major

**With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 03131)**

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. Twelve units selected from Anthropology 102, English 250A-250B (three or six units), History 110A-110B (three or six units). (12 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.

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. History 430W, English 508W, 581W, or Rhetoric and Writing Studies 500W, or Sociology 396W with a grade of C (2.0) or better.

Major. A minimum of 33 upper division units to include American Studies 499, 580; and nine courses from one of the following clusters or a specially designed cluster.

In the selected cluster, the student will normally take three courses in one area and two courses in each of three other areas. However, the student must take at least one course in each area. The student may take no more than three courses in one discipline on the major program. The student must file with the Office of Admissions and Records a master plan approved by the adviser for the American studies curriculum.

American Communication

People: Decision Makers

History 496; Management 356; Political Science 335, 422, 436, 531; Public Administration 520; Sociology 531; Women's Studies 530.

Process: Communications

No more than one course in each discipline.

Africana Studies 360, 362, 461, 480; American Indian Studies 430; Art 558; Chicana and Chicano Studies 335; Communication 371, 408, 500, 502, 504; English 524, 525; Music 351D; Political Science 426; Psychology 340; Sociology 456.

Place: United States

Geography 321; History 534, 535A, 535B, 546A, 546B, 547A, 547B, 548A, 548B.

Period: Nuclear Age

Two of the following:
English 525; History 536; Natural Science 333; Women's Studies 530.

Special Study: American Studies 499.

Cultural Institutions and Artifacts*People: The Family*

Africana Studies 331; Chicana and Chicano Studies 320; Child and Family Development 436; Sociology 522.

Process: Material Culture

Anthropology 302; Art 347, 550; English 526 (when offered as American Literature and American Art); Geography 354; Natural Science 333.

Place: The Southwest

No more than one course in each discipline.
Chicana and Chicano Studies 320, 335, 350A, 350B, 376; History 541A, 541B.

Period: Colonial

No more than one course in each discipline.
Anthropology 446; History 530, 548A.

Special Study: American Studies 499.

Cultural Pluralism*People: Ethnic Community*

Sociology 355 and one of the following: Africana Studies 471B; American Indian Studies 440; Anthropology 446; Chicana and Chicano Studies 320 or 350B.

Process: Development of Identity

Africana Studies 362 or 461; Chicana and Chicano Studies 335; Music 351; Political Science 531; Sociology 430 or 457; Women's Studies 352 or 553 (when American in content).

Place: The City

Chicana and Chicano Studies 303; Economics 458; Geography 354; Political Science 422; Public Administration 512; Sociology 557.

Period: 1840 to the Present

No more than one course in each discipline.
English 523, 524, 525, 527, 528 (when appropriate); History 535A, 541B, 548B; Women's Studies 341B or 530.

Special Study: American Studies 499.

Majority American Goals and Values*People: The Middle Class*

Art 560; History 548B; Political Science 531; Sociology 531; Women's Studies 530.

Process: Tradition and Change in the Evolution of American Goals and Values

No more than one course in each discipline.
Anthropology 444; Economics 474; English 525; History 435, 545A, 545B, 548A, 548B; Management 356, 456; Political Science 334, 335, 346, 348; Sociology 433, 456, 457, 537.

Place: United States

English 523, 524, 525, 527; Geography 370; History 540, 546B, 547A, 547B; Political Science 305.

Period: Twentieth Century

Economics 338; English 525; History 310B, 535A, 535B, 536; Management 356; Music 351D; Women's Studies 341B.

Special Study: American Studies 499.

American Studies Minor

The minor in American studies consists of a minimum of 15 units to include six units selected from History 546A-546B or 547A-547B or 548A-548B; and nine units selected from the courses listed below—six units from one grouping and three from the other, with no more than six units from any one department's or program's offerings:

Humanities: American Studies 580; Art 560; English 522, 523.

Social Sciences: Anthropology 444; Economics 338; Geography 354; Political Science 305; Sociology 433.

With the consent of the American studies adviser, six units in courses not listed here may be included in the student's program. 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. A minimum of six upper division units must be completed in residence at San Diego State University. In designing their American studies minor program, students may not include courses drawn from their major department.

Courses**LOWER DIVISION COURSE****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)****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.

499. Special Study (1-3)

Prerequisite: Consent of instructor.

Individual study in interdisciplinary humanities and social sciences work. Maximum credit six units.

UPPER DIVISION COURSE**(Also Acceptable for Advanced Degrees)****580. Topics in American Studies (1-3) I, II**

Topics dealing with cultural images and myths, social protest, folklore; themes focusing upon fear, alienation and nationalism; problems around racism, minorities and counter-cultures. See Class Schedule for specific content. May be repeated once with new content; and with the approval of the adviser, more than once by American studies majors. Maximum credit six units applicable to a master's degree in American studies.

Anthropology

In the College of Arts and Letters

OFFICE: Storm Hall 143B
TELEPHONE: (619) 594-5527

FAX: (619) 594-1150 / E-MAIL: anthro@mail.sdsu.edu

WWW: <http://www-rohan.sdsu.edu/dept/anthro/anthropology.html>

Faculty

Emeritus: Goldkind, Rogers, Rollefson, Watson
Chair: Himes
Professors: Ball, Greenfeld, Henry, Himes, Leach, Lippold,
Pendleton, Rohrl, Whitney
Associate Professor: Moore
Assistant Professors: Gamble, Sonek

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

Anthropology is the far-reaching study of human beings as both biological and culturally adaptive organisms. Anthropologists study the physical and mental characteristics, social relationships, institutions, customs, myths, and geographic distribution of human populations.

The anthropology major provides a broad background for the various specialized areas in the field, such as archaeology, the analysis of past cultures; cultural anthropology, the study of cultural similarities and differences in contemporary societies; linguistics, the evaluation of cultural differences in communication; and physical anthropology, the analysis of biological characteristics of past and present populations. Elective courses provide information on the newest developments in the field and give the anthropology graduate an understanding of human nature in the context of past and present environmental influences.

Employment opportunities for anthropology graduates include work in senior citizen and minority agencies, the National Park Service, state archaeological services, marketing, environmental impact projects, urban affairs, state and local governmental agencies, and business.

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.

Anthropology Major

With the B.A. Degree in Liberal Arts and Sciences

(Major Code: 22021)

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. (6 units)

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units in Anthropology to include Anthropology 301, 302, 303, 304; and 24 additional units of upper division courses in anthropology selected from the following areas:

Area/Regional: Nine units selected from Anthropology 349, 350, 442, 444, 445, 446, 448, 449, 450, 452, 453, 471, 472, 499, 582.

Methods: Six units selected from Anthropology 312, 410, 432, 439, 499, 500, 560, 561, 580, 583, Sociology 301.

Theory/Topical: Nine units selected from Anthropology 402, 406, 422, 424, 430, 483, 499, 501, 503, 508, 509, 583.

The student will file with the Office of Admissions and Records a master plan approved by the adviser for the anthropology curriculum.

Anthropology Minor

The minor in anthropology consists of a minimum of 18 units in anthropology to include Anthropology 101, 102, and 12 upper division units in anthropology selected from:

Area/Regional: Six units selected from Anthropology 349, 350, 442, 444, 445, 446, 448, 449, 450, 452, 453, 471, 472, 499, 582.

Methods: Three units selected from Anthropology 301, 302, 303, 304, 312, 410, 432, 439, 499, 500, 560, 561, 580, 583.

Theory/Topical: Three units selected from Anthropology 402, 406, 422, 424, 430, 483, 499, 501, 503, 508, 509, 583.

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

LOWER DIVISION COURSES

101. Human Biocultural Origins (3) I, II (CAN ANTH 2)

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.

102. Introduction to Cultural Anthropology (3) I, II (CAN ANTH 4)

May be taken before Anthropology 101.

Our relationship to our environment; types of preliterate society; systems of social organization, politics, economics, religion, and language.

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)

301. Principles of Physical Anthropology (3)

Two lectures and three hours of laboratory.

Prerequisite: Anthropology 101.

Primate comparative anatomy and human paleontology. Physical measurement of the living subject and skeletal specimens. The statistical treatment of data in physical anthropology. Applications of physical anthropology in industry and medicolegal problems.

302. Principles of Archaeology (3)

Two lectures and three hours of laboratory.

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.

303. History of Ethnological Theory (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.

304. Principles of Anthropological Linguistics (3)

Two lectures and three hours of laboratory.

Prerequisite: Anthropology 102.

The structural nature of language. How languages differ, change and influence each other. The language families of the world. The significance of language for human social life in a variety of cultures.

312. Archaeological Field Techniques (3)

Six hours of activity.

Prerequisite: Anthropology 302.

Archaeological excavation of significant sites in San Diego. Techniques of excavation, recording, and surveying.

349. Roots of Civilizations (3)

Prerequisite: Open only to upper division students who have completed the General Education requirement in Foundations 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.

350. World Ethnography (3)

Prerequisites: Anthropology 102, and completion of the General Education requirement in Foundations 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.

402. Dynamics of Biocultural Diversity (3)

Prerequisite: Completion of the General Education requirement in Foundations 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.

Interaction of biology and culture in human populations. Relating genetic and cultural processes to the changes in human populations over time.

406. Nonhuman Primates (3)

Prerequisite: Anthropology 101.

Basic aspects of nonhuman primates, geographical distribution, ecology (habitat, diet), external and internal morphology, locomotion and social behavior, reproduction and development.

410. Language in Culture (3)

Prerequisites: Anthropology 102, and completion of the General Education requirement in Foundations 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.

422. Music and Culture (3)

Prerequisites: Anthropology 102, and completion of the General Education requirement in Foundations II.C., Humanities.

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.

424. Primitive Religion (3)

Prerequisites: Anthropology 102, and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

Beliefs and ritual of primitive man. Magic and religion. Forms of animism and polytheism. Primitive mentality and the supernatural.

430. Anthropology of Law and Dispute Processing (3)

Prerequisite: Anthropology 102, and completion of the General Education requirement in Foundations II.B, Social and Behavioral Sciences required for nonmajors.

Law, social control, and dispute processing studied in sociocultural context. Law in Western society compared with "law-ways" in a number of traditional or nonindustrialized cultures. Basic concepts and theories about law examined crossculturally.

432. Principles of Personality in Culture (3)

Prerequisites: Anthropology 102, and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors.

Principles related to the determinants of human behaviour contained in culture. Studies of behavior crossculturally.

439. Cultural Comparisons Through Film (3)

Prerequisite: Completion of the General Education requirement in Foundations 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.

442. Cultures of South America (3)

Prerequisites: Anthropology 102, and completion of the General Education requirement in Foundations 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.

444. American Culture (3)

An "inside-out" view of America. What culture has to do with feeling like an American. Theory and method in anthropology. Approaches include subcultures, American values, and mass media.

445. Ethnology of North America (3)

Prerequisites: Anthropology 102, and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors.

Native cultures and the role of environmental and historical factors in North America.

446. Southwestern Ethnology (3)

Prerequisites: Anthropology 102, and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors.

Indian cultures of the American Southwest in historic times; ecological adaptations, responses to white contact, adaptations to modern American life.

448. Cultures of Oceania (3)

Prerequisites: Anthropology 102, and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors.

The aboriginal cultures and peoples of Australia, Melanesia, Micronesia, and Polynesia in prehistoric, historic, and modern times.

449. Cultures of Sub-Saharan Africa (3)

Prerequisites: Anthropology 102, and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors.

Indigenous peoples and cultures of Africa south of the Sahara. A comparison of cultural traditions, social organization, and modern trends in newly emergent nations of the area.

450. Cultures of India (3)

Prerequisites: Anthropology 102, and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors.

Indigenous peoples and cultures of India and contiguous areas of South Asia. The development of cultural traditions, social organization, and modern trends.

452. Japanese Society (3)

Prerequisites: Anthropology 102, and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors.

Culture and social organization of Japanese people. Traditional Japanese economic, social, political and religious institutions. Okinawa and overseas Japanese. Recent industrial and urban changes in modern Japan.

453. Cultures of Southeast Asia (3)

Prerequisite: Completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors. Recommended: Anthropology 102.

Cultural anthropological study of cultures and societies of mainland (Myanmar, Thailand, Laos, Cambodia, Vietnam) and insular (Malaysia, Indonesia, Philippines) Southeast Asian nations. Traditional economic, social, political, and religious institutions. Recent changes in modern Southeast Asia.

471. Archaeology of North America (3)

Prerequisite: Anthropology 101 or 102.

Origin of the American Indian and survey of the main prehistoric cultures of the North American continent.

472. Southwestern Prehistory (3)

Prerequisite: Anthropology 101 or 102.

Prehistoric Indian cultures in the American Southwest; ecological adaptations and outside cultural influences.

483. Health and Nutrition in Antiquity (3)

Prerequisite: Anthropology 101 or 102.

Health and disease patterns in human populations from the earliest times. Analysis of food resources, their impact on health and nutrition of prehistoric peoples.

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.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)

500. Primate Social Behavior (3)

Two lectures and three hours of laboratory.

Prerequisite: Anthropology 101.

Analysis of modes of primate socialization and development of social behaviour with emphases on communication, group structure, aggression, and sex. Various methods of analysis and observation practiced utilizing primate collection at the San Diego Zoo.

501. Paleoanthropology (3)

Prerequisite: Anthropology 101. Recommended: Anthropology 301.

Fossil evidence for human evolution. Comparative and functional anatomy of fossil human and infrahuman primates; geochronology, paleoecology, and cultural associations; taxonomic implications.

503. Human Variation (3)

Prerequisite: Anthropology 101.

Morphological, physiological and genetic aspects of human variability. Significance of this diversity in the biological adaptations of human populations.

505. Human Osteology (3)

Two lectures and three hours of laboratory.

Prerequisite: Anthropology 101. Recommended: Anthropology 301 and/or Biology 212.

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.

508. Medical Anthropology (3)

Prerequisite: Anthropology 101 or 102.

Evolution and ecology of disease, medical beliefs and practices in non-Western cultures, and complexities of health care delivery in pluralistic societies.

509. Culture and Biological Aging (3)

Prerequisite: Anthropology 101 or 102.

Do different populations age at different rates? Theories of biological aging, genetics of longevity and cultural influences on biological aging. Process of aging and role of the aged in various cultures.

560. Advanced Archaeological Field Methods (3)

One lecture and six hours of laboratory.

Prerequisite: Anthropology 312.

Advanced projects in excavation and stabilization of ruins, archaeological surveys, laboratory analysis and preparation of reports.

561. Archaeological Laboratory Methods (3)

Two lectures and three hours of laboratory.

Prerequisite: Anthropology 560.

Application of palynology, paleontology and relevant technologies. Individual laboratory research project required.

580. Anthropological Data Analysis (3)

Two lectures and three hours of laboratory.

Prerequisites: Anthropology 101 or 102 and a statistics course. Recommended: Psychology 270 or Sociology 201.

Computer oriented data analysis class utilizing anthropological data sets. Special section of the SPSS computer workshop is required.

582. Regional Anthropology (3)

Prerequisite: Anthropology 102.

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.

583. Topical Anthropology (3)

Prerequisite: Anthropology 102.

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.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

OFFICE: Art 505

TELEPHONE: (619) 594-6511

FAX: (619) 594-1217

In the College of Professional Studies and Fine Arts

Accredited by the National Association of Schools of Art and Design and the Foundation for Interior Design Education Research.

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.

Faculty

Emeritus: Baker, K., Berg, Bigelow, Covington, Dirks, Dumlao, Fisch, Frick, Higgins, Hodge, Hopkins, Hunter, Longenecker, Moaney, Perczel, Ray, Rogers, Sorenson, Tanzer, Wallace

Director: Orth

Professors: Austin, Baker, R., Cooling, Cotten, Dominguez, Esser, Hayakawa, Miller, Orth, Rigby, Roberts-Fields, Shirk

Associate Professors: Berelowitz, Burkett, Mansfield, Maruyama, Merritt, Nelson, Yapelli

Assistant Professors: Nakamura, Ning, Siprut

Lecturers: Asebedo, Darroch, Hamada, Keely, Lara, Litrownik, Wright

Offered by the School of Art, Design and Art History

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 environmental design.

Emphasis in graphic design.

Emphasis in interior design.

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, Design and Art History 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, metalsmithing, jewelry, and textiles; art history; studio arts; environmental design; graphic design; interior design; 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 except art history require a set of core courses consisting of two courses each 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 environmental design, interior design, and graphic design have a preprofessional orientation supplemented by a strong liberal arts background. Environmental design and interior design can lead to interior, architectural, landscape design or city planning. Graphic design prepares the student for the areas of environmental graphics, art direction, visual design for the contemporary media of advertising, or editorial illustration. 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, jewelry, metalsmithing, textile design and weaving.

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)

Preparation for the Major. Art 100, 101, 158, 258, 259, and 263. (18 units)

Foreign 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. 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."

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 27 upper division units in art history to include Art 593; and 24 units selected from Art 557 through 577, and Philosophy 541.

Emphasis in Studio Arts (Major Code: 10021)

Preparation for the Major. Art 100, 101, 102, 103, 203, 204, 216, 258, 259, and six units of art electives. (33 units)

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 24 upper division units in art to include Art 403, 404, and 500; six units of art history; and nine units of art electives selected in consultation with an adviser.

Art Major

With the B.A. Degree in Applied Arts and Sciences

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)

Preparation for the Major. Art 100, 101, 102, 103, 220, 258, 259, and six units of art electives. (27 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 27 upper division units in art to include three units in each of the areas listed below, and six units of extended work in one of the areas; three units of art electives; and six units of art history.

Fiber: Art 334, 435, 436, 534, 535, 536

Metal: Art 331, 431, 432, 531, 532, 533

Clay: Art 325, 425, 525, 526

Wood: Art 323, 423, 523

Emphasis in Environmental Design

(Major Code: 10021)

Preparation for the Major. Art 100, 101, 102, 103, 148, 247, 248, 249, 250, 251, 258, 259. (36 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 27 upper division units in art to include Art 348, 450, 454, 547, 550; six units selected from Art 323, 325, 416, 423, 451, 453, 498A, 516, 552, 591; and six units of art history.

Emphasis in Graphic Design

(Major Code: 10091)

Preparation for the Major. Art 100, 101, 102, 103, 241, 243, 258, 259; and six units of art electives (Art 240 recommended). (30 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 27 upper division units in art to include Art 341; six units of art history; 12 units selected from Art 340, 348, 440, 441, 443, 444, 445, 540, 541, 542, 543, 544 (to include at least one of the following pairs: 340/540, 348/440, 441/541, 443/543, 444/544 or 445/542); and six units of art electives. Electives from other departments may be substituted with prior consent of major adviser.

Emphasis in Interior Design

(Major Code: 02031)

Art majors wishing to enter one of the Interior Design upper division courses (Art 451, 453, 552, 553) must receive, as a condition of junior level qualification, a passing evaluation of a portfolio of work submitted to the Interior Design Evaluation Committee. Any advance enrollment in the above-listed upper division courses will remain provisional until clearance of the portfolio review. Reviews are held prior to the beginning of the fall and spring semesters. See the School of Art, Design and Art History office for specific information concerning current policies pertaining to the review, content of the portfolio, and the schedule to be observed.

Preparation for the Major. Art 100, 101, 102, 103, 148, 247, 248, 249, 250, 251, 258, 259. (36 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 27 upper division units in art to include Art 352, 451, 452, 453, 552, 553; three units selected from Art 323, 325, 334, 436, 450, 547, 591; and six units of art history (Art 577 recommended).

Emphasis in Painting and Printmaking

(Major Code: 10021)

Preparation for the Major. Art 100, 101, 102, 103, 203, 258, 259, and six units selected from Art 204, 207, or 210. (27 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 24 upper division units in art to include six units of art history, and 18 units selected in consultation with the adviser from Art 403, 404, 406, 407, 408, 410, 411, 416, 500, 502, 503, 504, 506, 510, 511.

Emphasis in Sculpture

(Major Code: 10021)

Preparation for the Major. Art 100, 101, 102, 103, 216, 217, 258, 259; and three units selected from Art 203, 204, 220, 225, 231, 234. (27 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 27 upper division units to include Art 416, 418, 498A, 516 or 518, 517; six units of art history; and six units selected from Art 323, 331, 403, 404, 500, 516, 518, 591.

Art Major

In preparation for the Single Subject Teaching Credential

With the B.A. Degree in Applied Arts and Sciences

(Major Code: 10021)

Students may choose to complete this program of study for the Art major, but must also take and pass the PRAXIS examination to clear the required Subject Matter Competency in Art for the Single Subject Credential Program. See the school's undergraduate adviser for more information.

All candidates for a teaching credential must complete all requirements as outlined in this section of the catalog under Policy Studies or Teacher Education.

This major may be used by students in teacher education as an undergraduate major for the B.A. degree in applied arts and sciences.

Preparation for the Major. Art 100, 101, 102, 103, 204, 216, 220, 225, 258, 259, and three units selected from 203, 210, or 241. (33 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Teaching Major. A minimum of 30 upper division units to include Art 325, 331, 387, 404, 435; six units of art history; and nine units selected from Art 416, 425, 431, 436, 504, 535, and 536.

Art Minor

The minor in art consists of a minimum of 21 units in art, to include Art 100 and 101 and 12 units of upper division courses in art taken from art history, applied design, environmental design, interior design, painting, 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

The minor in art history includes a minimum of 21 units in art distributed as follows: Six units to include Art 258, 259, and three units selected from Art 158 or 263. Twelve units selected from Art 557, 558, 559, 560, 564, 565, 568, 573A, 573B, 574, 575, 577.

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

LOWER DIVISION COURSES

100. Drawing and Composition (3) I, II (CAN ART 8)

Six hours.

The ordering of two-dimensional space through drawing.

101. Two Dimensional Design and Color (3) I, II, S (CAN ART 14)

Six hours.

Fundamentals of space and color design. Basic course used as a prerequisite for advanced work.

102. Drawing and Composition (3) I, II

Six hours.

Prerequisite: Art 100.

Line and value in drawing; emphasis on structure and proportion, sketching, gesture, and contour drawing.

103. Three Dimensional Design (3) I, II (CAN ART 16)

Six hours.

Prerequisite: Art 101.

Introduction and investigation of design and theory, and practice in three dimensions.

148. Visual Presentation I (3) I, II

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.

157. Introduction to Art (3) I, II

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.

158. Arts of Native America, Sub-Saharan Africa, and Oceania (3)

Arts of diverse societies of Native America, Sub-Saharan Africa, and Oceania in cultural context. Art forms from ancient to contemporary period.

203. Life Drawing (3) I, II

Six hours.

Prerequisite: Art 102.

Drawing from the nude model. Maximum credit six units.

204. Painting (3) I, II (CAN ART 10)

Six hours.

Prerequisites: Art 101 and 102.

Pictorial composition and techniques of painting. Maximum credit six units.

207. Introduction to Fine Art Photography (3) I, I

Six hours.

Prerequisites: Art 102 and 103.

Black and white fine art photography including lighting techniques, small format cameras, metering, darkroom instruction, and fine art processes. Maximum credit six units.

210. Printmaking (3) I, II

Six hours.

Prerequisites: Art 101, 102 and consent of instructor.

Introduction and exploration of basic printmaking media. Emphasis on aesthetic and technical processes in intaglio, lithography, relief and serigraphy.

216. Sculpture (3) I, II (CAN ART 12)

Six hours.

Prerequisite: Art 103.

Introduction and experimentation of basic sculpture ideas, methods and materials. Maximum credit six units.

217. Figurative Sculpture (3) I, II

Six hours.

Prerequisite: Art 103.

Creative experimentation with sculptural forms from the human figure.

220. Design in Crafts (3) I, II

Six hours.

Prerequisite: Art 103.

Visual and structural form in crafts.

225. Beginning Handbuilt Ceramics (3) I, II (CAN ART 6)

Six hours.

Prerequisite: Art 103.

Design and construction of handbuilt ceramic forms. Introduction of glaze for surface enrichment. Maximum credit six units.

231. Beginning Jewelry and Metals (3) I, II

Six hours.

Prerequisite: Art 220.

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.

234. Weaving (3) I, II

Six hours.

Prerequisite: Art 220.

Structure and design of woven fabrics. Maximum credit six units.

240. Fundamentals of Digital Media (3) I, II

Six hours.

Prerequisites: Grade of C (2.0) or better in Art 100, 101, 102, and 103.

Principles of digital media used in visual communication.

241. Beginning Graphic Design (3) I, II

Six hours.

Prerequisites: Grade of C (2.0) or better in Art 100, 101, 102, and 103.

Proof of completion of prerequisites required: Copy of transcript.

Fundamental principles of visual communication.

243. Typography (3) I, II

Six hours.

Prerequisite: Grade of C (2.0) or better in Art 241. **Proof of completion of prerequisite required:** Copy of transcript.

Letterforms in visual communication, including historical significance of written language, semantics, and syntax as functions of expressive visual design.

247. The House and Its Environment (3) I, II, S

Architecture, interior design, landscape and city planning for forming the physical and aesthetic environment. Not open to students with credit in Art 347.

248. Visual Presentation II (3) I, II

Six hours.

Prerequisites: Art 102, 103, 148. **Proof of completion of prerequisites required:** Copy of transcript.

Methods, materials, and tools of the professional environmental designer stressing art principles.

249. Visual Presentation III (3) I, II

Six hours.

Prerequisite: Art 248. **Proof of completion of prerequisite required:** Copy of transcript.

Methods, materials, and tools of the professional environmental designer stressing art principles.

250. The Contemporary House (3) I, II

Six hours.

Prerequisite: Art 248. **Proof of completion of prerequisite required:** Copy of transcript.

Elementary problems in neighborhood planning, house design, and landscaping.

251. Interior Design I (3) I, II

Six hours.

Prerequisites: Art 102 and 103. **Proof of completion of prerequisites required:** Copy of transcript.

Elementary functional and aesthetic studies in interior space and form. Relationships of light, color, texture, shape and volume.

**258. Introduction to Art History (3) I, II (CAN ART 2)
(258 + 259: CAN ART SEQ A)**

Art development in painting, sculpture, architecture, and handicrafts from the dawn of art to the Renaissance. Illustrated.

**259. Introduction to Art History (3) I, II (CAN ART 4)
(258 + 259: CAN ART SEQ A)**

The period from the Renaissance through the modern school treated in the same manner as in Art 258.

263. Asian Art (3) II

Arts of Asian countries including China, India, and Japan from pre-historic to pre-modern times. Role of religious belief and state ideology in shaping visual characteristics of regional cultures in Asia.

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)**

308. Chinese Aesthetics and the Brush (3)

Two lectures and two hours of activity.

Aesthetic principles and cultural and literary background of oriental brush painting. Basic techniques and practice in the discipline toward self-expression.

323. Furniture Design (3) I, II

Six hours.

Prerequisites: Art 102 and 220.

Study of the principles of design through the making of furniture.

325. Beginning Throwing-Ceramics (3) I, II

Six hours.

Prerequisite: Art 220. Recommended: Art 225.

Basic methods of forming, decorating, glazing and firing pottery forms with emphasis on the use of the potter's wheel.

331. Beginning Jewelry and Metalwork (3) I, II

Six hours.

Prerequisite: Art 220.

Creative design and construction in metal of jewelry and small objects. Techniques in three-dimensional forming and constructions in nonferrous metals. Not open to students with credit in Art 231.

334. Advanced Weaving (3) I, II

Six hours.

Prerequisite: Art 220.

Total credit in Art 234, 334 and 534 limited to nine units.

Advanced problems in fabric design and weave construction including tapestry and rug weaving techniques. Maximum credit six units.

340. Photographic Imagery (3) I, II

Six hours.

Prerequisites: Grade of C (2.0) or better in Art 100, 101, 102, 103, and Art 240 if completed.

Visual communication and expression using photographic media including photomechanical and digital processes and theory of color and light.

341. Graphic Design (3) I, II

Six hours.

Prerequisite: Grade of C (2.0) or better in Art 243. **Proof of completion of prerequisite required:** Copy of transcript.

Lay out, typography and reproduction applied to contemporary print and digital media.

347. The House and Its Environment (3) I, II, S

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.

348. Environmental Media (3) II

Six hours.

Prerequisite: Art 249 or 341.

Design communication and documentation techniques using photography, exhibition, portfolio, and publication orientations as they relate to environmental design.

352. Methods and Materials of Interior Design (3) I, II

Prerequisites: Art 250 and 251.

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.

387. Design for Teachers (3) I, II, S

Six hours.

Prerequisite: Art 101, or upper division standing and consent of instructor.

A design-crafts course that explores in depth materials and processes that could be used with young people.

403. Advanced Life Drawing (3) I, II

Six hours.

Prerequisite: Art 203.

Drawing the nude model. Maximum credit six units.

404. Intermediate Painting (3) I, II

Six hours.

Prerequisite: Art 204.

Concepts that enhance basic painting principles and a broad range of painting issues. Maximum credit six units.

406. Experimental Processes in Painting and Drawing (3)

Six hours.

Prerequisites: Art 203 and 204.

Structure in picture making.

407. Black and White Photography as a Fine Art Medium (3) I, II

Six hours of activity.

Prerequisite: Art 207.

Intermediate black and white photography and darkroom techniques combined with independent research in contemporary art and photography. Criticism in contemporary context. Maximum credit six units.

408. Color Photography as a Fine Art Medium (3) I

Six hours of activity.

Prerequisite: Art 407.

Color photography as a fine art medium, including color theory, transparency and negative film exposure controls, darkroom techniques, and electronic flash and lighting techniques for color photography. Maximum credit six units.

410. Intaglio Printmaking (3) I, II

Six hours.

Prerequisites: Art 203 and 210.

Creative intaglio—etching, drypoint, aquatint, engraving and variations. Emphasis on fine print quality and technical development. Maximum credit six units.

411. Lithography Printmaking (3) I, II

Six hours.

Prerequisites: Art 101 and 203.

Creative lithography—stone and plate planographic process. Emphasis on fine print quality and technical development. Maximum credit six units.

416. Intermediate Sculpture (3) I, II

Six hours.

Prerequisite: Art 216.

Individual investigations into sculpture ideas, methods and materials. Individual development in sculpture. Materials may include clay, plastics, paper or wood. Maximum credit six units.

418. Metal Sculpture (3)

Six hours.

Prerequisite: Art 216.

Sculpture ideas and methods using metal fabrication and introductory foundry processes. Individual development in sculpture. Maximum credit six units.

423. Advanced Furniture Design (3) I, II

Six hours.

Prerequisite: Art 323.

Advanced individual design: Exploration of materials, process and function. Maximum credit six units. Maximum combined credit of 12 units in Art 323, 423, and 523.

425. Intermediate Ceramics (3) I, II

Six hours.

Prerequisite: Art 325.

Continuation of Art 325. Further development of knowledge, skills and philosophy of ceramics through individual creative projects.

431. Intermediate Jewelry and Metalwork (3) I, II

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.

432. Metalsmithing (3)

Six hours.

Prerequisite: Art 231 or 331

Creative design and techniques in metalsmithing.

435. Nonwoven Textile Construction (3) I, II

Six hours.

Prerequisite: Art 220.

Textile structures with an emphasis on nonloom techniques.

436. Textile Design (3) I, II

Six hours.

Prerequisite: 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, silk- screen, batik, and tie-dye. Maximum credit six units.

440. Three-Dimensional Graphic Imagery (3)

Six hours.

Prerequisite: Grade of C (2.0) or better in Art 341.

Design for environmental graphics, signage systems, displays and packaging.

441. Advanced Graphic Design – Advertising Media (3) I, II

Six hours.

Prerequisites: Grade of C (2.0) or better in Art 341. **Proof of completion of prerequisite required:** Copy of transcript.

Application of visual design concepts to graphic design and advertising.

443. Drawing and Illustration for Graphic Design (3) I, II

Six hours.

Prerequisites: Grade of C (2.0) or better in Art 100, 101, 102, 103 and 203.

Methods, materials, and tools related to graphic design.

444. Sequential Media (3)

Six hours.

Prerequisite: Grade of C (2.0) or better in Art 341.

Study and presentation of sequential imagery. Maximum credit six units.

445. Graphic Design Internship (3) Cr/NC I, II

Prerequisites: Portfolio review and a grade of C (2.0) or better in one 400 or 500-level graphic design course.

Field experience with local practicing professionals. Maximum credit six units.

450. Synergetic Environments (3) I

Six hours.

Prerequisites: Art 249 and 454.

Synthesis of materials, space, sound and light using exploratory methods in full scale projects.

451. Interior Design II (3) I, II

Six hours.

Prerequisites: Art 249, 250, 251, and completion of portfolio requirement. **Proof of completion of prerequisites required:** Copy of transcript.

Survey, analysis and conceptual design methods of residential interiors stressing materials, equipment, components and structural detailing. Maximum credit six units.

452. Interior Design Practicum (3) Cr/NC I, II

Nine hours of laboratory.

Prerequisite: Art 453. **Proof of completion of prerequisite required:** Copy of transcript.

Field experience with local professional interior designers in client relationships, business procedures, supervision of subcontracted work and installation, and execution of contracts. Maximum credit six units.

453. Interior Design III (3) I, II

Six hours of activity.

Prerequisites: Art 249, 250, 251, and completion of portfolio requirement. **Proof of completion of prerequisites required:** Copy of transcript.

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.

454. Environmental Design (3) I, II

Six hours.

Prerequisites: Art 247 and 250.

Survey, analysis and design synthesis of problems of more complexity, through interiors, to landscape, to architectural planning and, finally, concern for city design.

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.

497. Senior Investigation and Report (3) I, II

Nine hours for 497A; three hours for 497B.

Prerequisites: Six upper division units in art, and consent of instructor.

Individual research into areas of studio and art history not covered by regular courses.

A. Studio Investigations**B. Art History Investigations****498. Senior Project (3) I, II**

Nine hours for 498A; three hours for 498B.

Prerequisite: Consent of instructor.

Investigation in art. Formal presentation of project.

A. Studio project**B. Art History project****499. Special Study (1-3) I, II**

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

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.

502. Inter-Media (1-3) I, II

Two hours for each unit of credit.

Prerequisites: Art 102 and 103.

Process and materials in plane and space. Maximum credit six units.

503. Life Drawing and Painting (3) I, II

Six hours.

Prerequisites: Art 204 and 403.

Drawing and painting from nude and costumed models. Maximum credit six units.

504. Advanced Painting (3) I, II

Six hours.

Prerequisite: Six units of Art 404.

Approaches to contemporary concepts in painting. Maximum credit six units.

506. Contemporary Issues for Studio Artists (3) I

Prerequisites: Upper division or graduate standing in art and consent of instructor.

Theory, practice, and philosophy of being an artist. Independent research on current art concepts and issues. Material will encompass the past five years. Field trips.

510. Intaglio Printmaking in Color (3) I, II

Six hours.

Prerequisite: Art 410.

Advanced creative intaglio printmaking in color, including zinc and copper plate; etching, drypoint, aquatint, engraving, embossing and color variations. Emphasis on fine print quality and technical development in the color process unique to this medium. Maximum credit six units.

511. Lithography Printmaking in Color (3) I, II

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.

516. Advanced Sculpture (3) I, II

Six hours.

Prerequisite: Art 416.

Individual investigations into sculpture ideas, methods and materials. Individual development in sculpture. Materials may include clay, plastics, paper or wood. Maximum credit six units.

517. Advanced Figurative Sculpture (3) I, II

Six hours.

Prerequisites: Art 216 and 217.

Figurative study with emphasis on individual exploration. Maximum credit six units.

518. Advanced Metal Sculpture (3)

Six hours.

Prerequisite: Art 418.

Sculpture ideas and methods using metal fabrication and foundry processes. Individual development in sculpture. Maximum credit six units.

523. Advanced Furniture Design (3) I, II

Six hours.

Prerequisite: Art 423.

Advanced individual design; exploration of materials, process and function. Maximum credit six units. Maximum combined credit of 12 units in Art 323, 423, and 523.

525. Advanced Ceramics (3) I, II

Six hours.

Prerequisite: Art 425.

Study of ceramic design through creative projects of clay forms. Maximum credit six units.

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.

531. Advanced Jewelry and Metalwork (3) I, II

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.

532. Advanced Metalsmithing (3) I, II

Six hours.

Prerequisite: Art 432.

Advanced problems involving metal processes to increase technical competence while exploring personal design statements. Maximum credit six units.

533. Textile Techniques in Metal (3)

Six hours.

Prerequisite: Art 331 or 435.

Textile structures as applied to precious and nonprecious metals. Individually designed projects utilizing information acquired through samples and documentation. For students of fiber, metal and sculpture.

534. Advanced Weaving (3) I, II

Six hours.

Prerequisite: Art 334.

Advanced individual problems in weaving. Maximum credit six units. Maximum combined credit of nine units in Art 234, 334, and 534.

535. Advanced Nonwoven Textile Construction (3) I, II

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.

536. Advanced Textile Design (3) I, II

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.

540. Advanced Photographic Imagery (3) I, II, S

Six hours.

Prerequisites: Grade of C (2.0) or better in Art 340, or Art 207 and 240.

Visual communication and expression using photographic media, including photomechanical and digital processes. Preparation for multimedia and digital prepress. Maximum credit six units with consent of instructor.

541. Advanced Graphic Design – Visual Communication Systems (3) I, II

Six hours.

Prerequisite: Grade of C (2.0) or better in Art 440 or 441. **Proof of completion of prerequisite required:** Copy of transcript.

Design of visual communication systems relating to visual, verbal, and corporate identification strategies. Maximum credit six units.

542. Design Studio (3) I, II

Six hours.

Prerequisites: Portfolio review and grade of C (2.0) or better in one 400 or 500-level graphic design course.

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.

- 543. Advanced Drawing and Illustration for Graphic Design (3)**
Six hours.
Prerequisite: Art 443.
Refinement of visual imagery and advanced illustration problems.
- 544. Visual Communication: Emerging Technologies (3)**
Six hours.
Prerequisites: Grade of C (2.0) or better in Art 440 or 441 or 444; or Art 240 and a 500-level studio art course.
Advanced design 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.
- 547. Environmental Theory (3) I, II**
Prerequisite: Art 247 or 347.
Survey of alternative solutions to the problem of design of the physical environment.
- 550. Environmental Prototypes (3) I**
Six hours.
Prerequisites: Art 247, 250, 450.
Research and development of creative architectural concepts with emphasis in space enclosure systems and cybernetics.
- 552. Interior Design IV (3) I, II**
Six hours.
Prerequisites: Art 451, 453, and completion of portfolio requirement. **Proof of completion of prerequisites required:** Copy of transcript.
Projects in architectural interiors involving the use and perception of enclosed spaces. Space planning systems analysis. Maximum credit six units.
- 553. Interior Design V (3) I, II**
Six hours.
Prerequisite: Art 552. **Proof of completion of prerequisite required:** Copy of transcript.
Projects in interiors involving space planning analysis, specification writing, materials selection and furnishing design appropriate to commercial needs. Maximum credit six units.
- 557. Art of the Nineteenth Century (3) I, II**
Prerequisites: Art 258 and 259.
Development of painting, sculpture, and architecture from the French Revolution to 1900.
- 558. Twentieth Century European Art to 1945 (3) I, II**
Prerequisite: Art 259.
Major developments in the visual arts and art criticism from 1880 to 1945 (Post-Impressionism through Surrealism).
- 559. Twentieth Century European and American Art Since 1945 (3) I, II**
Prerequisites: Art 258 and 259. Recommended: Art 558.
Major developments in the visual arts and art criticism since 1945.
- 560. History of American Art (3)**
Prerequisites: Art 258 and 259.
Development of painting, sculpture, and architecture from the Native American art and Colonial Period to the present.
- 564. Art of China (3) II**
Prerequisite: Art 263.
History of Chinese art from prehistoric times through the Ching Dynasty.
- 565. Art of Japan (3) II**
Prerequisite: Art 263.
History of Japanese art from prehistoric times to the Meiji Restoration.
- 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.
- 569. Art of Sub-Saharan Africa (3)**
Prerequisite: Upper division standing.
Form and content of the art of Sub-Saharan Africa viewed within its cultural context.
- 573A. Early Renaissance Art in Italy (3)**
Prerequisites: Art 258 and 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.
- 573B. Late Renaissance Art in Italy (3)**
Prerequisites: Art 258 and 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.
- 574. Northern Renaissance Art (3)**
Prerequisites: Art 258 and 259.
Architecture, sculpture, and painting north of the Alps during the Renaissance period.
- 575. Baroque and Rococo Art (3)**
Prerequisites: Art 258 and 259.
Architecture, sculpture, and painting of the Baroque and Rococo periods.
- 577. History of Architecture (3)**
Prerequisites: Art 258 and 259.
Architecture from primitive times to the present.
- 591. Gallery Exhibition Design (3) I, II**
Six hours.
Prerequisite: Fifteen units of art.
Fundamental art elements and principles applied to the theories and techniques of gallery exhibition design.
- 592. Gallery Exhibition Design (3) I, II**
Six hours.
Prerequisite: Art 591.
Advanced problems in the theories and techniques of gallery exhibition design.
- 593. History and Methodology of Art History (3) II**
Prerequisites: Upper division standing; art history major or minor.
Readings and discussions on the historiography of art and on modern methodologies for art historical research.
- 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. Maximum credit of three units of 596 applicable to a master's degree. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES
Refer to Bulletin of the Graduate Division.

Asian Studies

In the College of Arts and Letters

OFFICE: Adams Humanities 4207
TELEPHONE: (619) 594-5262
FAX: (619) 594-2210
EMAIL: pmason@mail.sdsu.edu

Faculty

Chair: Madhavan

Professor: Madhavan

Lecturers: Wawrytko, Wittenborn

Associated Faculty: Bergstrom (Political Science), Chen (Information and Decision Systems), Cheng (Communicative Disorders), Chin (English and Comparative Literature), Choi (Linguistics), Chu (History), Donahue (Linguistics), DuFault (History), Ghosh (Women's Studies), Gupta (Public Administration), Hayakawa (Art), Henry (Anthropology), Higurashi (Japanese), Himes (Anthropology), Ima (Sociology), Johnson (Religious Studies), Kitajima (Japanese), Lippold (Anthropology), Liu (Sociology), Maruyama (Art), Miyamoto (Japanese), Nakamura (Art), Ning (Art), Oades (History), Pang (Teacher Education), Peterman (Music), Rogers (Library), Rogers (English and Comparative Literature), Russell (Policy Studies in Language and Cross-Cultural Education), Samraj (Linguistics), Shaw (Teacher Education), Strand (Dean, College of Arts and Letters), Tran (Teacher Education), Whitney (Anthropology), Young (Spanish), Yu (Public Health), Zhang (Chinese)

Offered by the Department

Master of Arts degree in Asian studies.

Major in Asian studies with the B.A. degree in liberal arts and sciences.

Minor in Asian studies.

The Major

Two and one-half billion people live in East, Southeast, and South Asia – half of the world's population. The importance of this immense and varied region cannot be overstated. More and more Americans are discovering the rich culture and history of the Asian people. Asians have made a major contribution to the world's literature and art, religion and philosophy, and are becoming increasingly important in international relations, business, and economics.

Nonmajors who wish to increase their knowledge about Asian peoples will find courses available in the Asian studies undergraduate and graduate programs.

The Department of Asian Studies seeks to provide a background for students planning to enter business, the academic environment, government, or community service – wherever the knowledge of Asia and Asians is needed. Students in the major develop an understanding of cultural heritage, societies, language and special forces. Areas of special interest may be pursued in depth.

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.

Asian Studies Major

With the B.A. Degree in Liberal Arts and Sciences

(Major Code: 03011)

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." Each student must file an individual master plan with the Asian Studies undergraduate adviser and with the Office of Admissions and Records.

A minor is not required with this major.

Preparation for the Major. Six units selected from Asian Studies 106, 107; Philosophy 101, 102; or Religious Studies 101; and six units selected from Anthropology 101, 102; Economics 101, 102; Geography 101, 102; or Political Science 101, 103. (12 units)

Art 258 and 259 (unless waived by the instructor) are needed if Art 366 is selected in the major. Art 263 is recommended.

Foreign Language Requirement. Competency (equivalent to that normally attained through two consecutive years of college study) in one major Asian language, such as Chinese or Japanese, unless specifically waived by the undergraduate adviser.

Upper Division Writing Requirement. Passing the University Writing Examination or completing English 508W, Linguistics 396W, Religious Studies 396W, Rhetoric and Writing Studies 305W, 500W, 503W, or Sociology 396W with a grade of C (2.0) or better.

Major. A minimum of 30 upper division units to include six units selected from Asian Studies 458, 459, 560, and 596. No fewer than 12 units must be selected from at least two humanities departments, and no fewer than 12 units must be selected from at least two social science departments. A student may select courses focusing on East Asia, South Asia, or Southeast Asia.

Appropriate humanities courses are Asian Studies 460, 560, 581; Art 308, 564, 565, 596*; Comparative Literature 455, 460, 470*, 490*, 571*, 577*, 580*; History 496*, 561, 564A, 564B, 565, 566, 567, 569, 570, 596*; Linguistics 496*; Music 561*; Philosophy 351, 496*, 575*, 596*; Religious Studies 401, 403, 499*, 580*, 581*, 583*.

Appropriate social science courses are Asian Studies 331, 483, 496*; Anthropology 448, 450, 452, 496*, 582*, 583*; Economics 330, 336*, 360, 365*, 465, 496*, 499*; Political Science 361, 362, 496*, 499, 575; Women's Studies 580*.

* When deemed relevant by the undergraduate adviser.

Asian Studies Minor

The minor in Asian studies consists of a minimum of 21 units to include Asian Studies 106, 107, and four units of an appropriate Asian language, e.g., Chinese or Japanese. Twelve units must be in upper division and divided equally between humanities and social science courses.

Appropriate humanities courses are Asian Studies 458, 460, 499, 560, 581, 596; Art 263, 308, 564, 565, 596 (when relevant)*; History 561, 564A, 564B, 565, 566, 567, 569, 570; Philosophy 351, 575 (when relevant)*, 596 (when relevant)*; Religious Studies 401, 403.

Appropriate social science courses are Asian Studies 331, 459, 483, 499, 596; Anthropology 450, 452; Economics 330, 465, 496 (when relevant)*, 499 (when relevant)*; Marketing 376*; Political Science 361, 362, 499 (when relevant)*, 575.

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 twelve upper division units must be completed in residence at San Diego State University.

* Additional upper division prerequisites are required for these courses.

Courses

LOWER DIVISION COURSES

106. Cultural Heritage of Asia (3) II

Social and cultural heritages of South, Southeast, and East Asian societies as revealed in art, drama, classical literatures, and folk traditions.

107. Social Foundations of Modern Asia (3) I, II

Social, economic, and political systems of South, Southeast, and East Asia in modern times.

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)

331. Women in Asian Societies (3) I

Socio-economic status of women in Asia. Feminism and status of women in 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.

458. Asian Traditions (3) I, II

Prerequisites: Six units of Asian-content courses or upper division standing, and completion of the General Education requirement in Foundations 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.

459. Contemporary Asian Cultures (3) I, II

Prerequisite: Six units of Asian-content courses or upper division standing, and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

Continuity and change in traditions and values of Asian societies in face of urbanization, modernization, and Westernization since mid-nineteenth century.

460. Contemporary Issues in Filipino-American Communities (3) I, II

Prerequisite: Upper division standing and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors.

Current issues and changes in the Filipino-American communities since 1965. Topics include new Filipino immigration, socio-economic adaptation, family, culture, intergenerational gaps, labor, education, psychology, employment, race relations, community institutions, civil rights and social movements, health, business, and politics.

483. Asian Diplomacy (3)

Prerequisite: Minimum three units selected from Asian Studies 106, 107, 458, 459; History 120, 121, 420; Political Science 103, 362, 375, 376, 481.

Political forces that influence foreign policies of Asian states.

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.

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 COURSES

(Also Acceptable for Advanced Degrees)

560. History of Japanese Business and Trade (3) I

Prerequisite: Upper division standing and consent of instructor.

Japanese business and trade from 1600 to present. Emphasis on Japan's rapid economic development since 1868, interplay of social and economic forces, structure of Japanese business system, and problems of international trade.

581. Women in Modern Asian History (3) II

Prerequisite: Asian Studies 458 or 459 or an upper division course in history with Asian content.

Historical and contemporary issues of politics, power, and women in Asia from mid-eighteenth century; gender roles, traditional values, social structures, levels of consciousness, effectiveness of organizations and individual contributions of historically significant women.

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. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

Astronomy

In the College of Sciences

OFFICE: Physics/Astronomy 210

TELEPHONE: (619) 594-6182

FAX: (619) 594-1413

EMAIL: astron@mintaka.sdsu.edu

WWW: <http://mintaka.sdsu.edu>

Faculty

Emeritus: May, Nelson

Chair: Angione

Professors: Angione (Director of Mt. Laguna Observatory), Daub, Etzel, Shafter, Young, A.

Associate Professor: Talbert

Adjunct: Cheng, Hood, Kovach, Olson, Veal, Young, A.T.

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 which 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 atmospheric physics.

Much of this work is done at the Mount Laguna Observatory operated by the University. The department also has excellent computer facilities.

Graduates with a bachelor's degree may find some positions in observatories and large astronomy departments. These jobs support continuing research and include telescope operators, instrument makers, opticians, electronic technicians, programmers, photographers, and laboratory technicians.

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.

Astronomy Major

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 19111)

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 101; Mathematics 150, 151, and 252; Physics 195, 195L, 196, 196L, 197, 197L. (28 units)

Recommended: Chemistry 200, Engineering 120 or Computer Science 106.

Foreign Language Requirement. Competency (equivalent to that which is normally attained through three consecutive semesters of college study) is required in one foreign language as part of the preparation for the major. Refer to the section of this catalog on

"Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 27 upper division units in astronomy and physics to include Astronomy 340, 350, 440, 450; Mathematics 342A; Physics 350, 354A; and six units selected with the approval of the astronomy undergraduate adviser. Recommended: Astronomy 320; Physics 354B, 400A, 406, 460.

Astronomy Major

With the B.S. Degree in Applied Arts and Sciences

(Major Code: 19111)

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 101; Physics 195, 195L, 196, 196L, 197, 197L. (15 units)

Recommended: Chemistry 200, Engineering 120 or Computer Science 106.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units in astronomy and physics to include Astronomy 340, 350, 440, 450, 498A, 498B; Physics 350, 354A, 400A, 460; and nine units selected from Astronomy 320; Physics 311, 354B, 400B, 406, 510.

Minor in Mathematics. All candidates for the B.S. degree in astronomy must complete a minor in mathematics, to include Mathematics 150, 151, 252, 342A; and six additional upper division units of electives in mathematics. Recommended: Mathematics 342B, 541; Statistics 551A.

Astronomy Minor

The minor in astronomy consists of a minimum of 15 units to include Astronomy 101 and 12 upper division units selected from Astronomy 301, 320*, 340*, 350*, 440*, 450*.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

* Additional prerequisites required.

Courses

LOWER DIVISION COURSES

101. Principles of Astronomy (3) I, II

Nature of the universe: the solar system, stars, galaxies, and remote universe.

109. Astronomy Laboratory (1) I, II

Three hours of laboratory.

Prerequisite: Credit or concurrent registration in Astronomy 101.

Demonstration of astronomical principles through observations with astronomical instruments and analysis of astronomical data.

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)**

301. Cosmology and Gravitational Collapse (3)

Prerequisite: Completion of the General Education requirement in Foundations 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).

320. Solar System Astronomy (3)

Prerequisites: Astronomy 101 and Physics 197, 197L.

Structures of the planets, their atmospheres and satellite systems, asteroids, comets, and meteoroids, and the interplanetary medium, including the sun's influence in the system.

340. Spherical Astronomy (3) I

Prerequisites: Credit or concurrent registration in Mathematics 252 and Physics 197.

Problems in spherical astronomy, astronomical coordinate systems, time, general precession, and introduction to astrometry.

350. Astronomical Techniques (3) II

Prerequisite: Astronomy 340.

Data acquisition and data reduction for current instrumentation including photoelectric photometry, direct imaging, and spectroscopy. Techniques for obtaining precise measurements.

440. Astrophysics of Stars (3) I

Prerequisites: Credit or concurrent registration in Mathematics 342A and Physics 354A.

Radiative transfer theory, atmospheres of stars and the emergent spectrum, interior structure and evolution of stars, stellar pulsations.

450. Astrophysics of Star Systems (3) II

Prerequisites: Credit or concurrent registration in Mathematics 342A and Physics 354A.

Applications of physics in study of binary stars, star clusters, the interstellar medium and galactic structure, galaxies, and cosmology.

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.

498A. Senior Project (1) I, II

Prerequisite: An acceptable master plan for graduation within one year.

Selection and design of individual projects.

498B. Senior Project (2) I, II

Six hours of laboratory.

Prerequisite: Astronomy 498A.

Individual research project culminating in a final written report.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

UPPER DIVISION COURSE

(Also Acceptable for Advanced Degrees)

596. Advanced Topics in Astronomy (2 or 3) I, II

Prerequisite: Consent of instructor.

Selected topics in theoretical 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. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

Biology

In the College of Sciences

OFFICE: Life Sciences 104
TELEPHONE: (619) 594-6767

Faculty

Emeritus: Alexander, Atkins, Baxter, Bohnsack, Brandt, Carmichael, Carpenter, Clark, Cohn, Collier, B., Collier, G., Cox, Crouch, Davis, C., Diehl, Etheridge, Ford, Futch, Hazen, Huffman, Hunsaker, Johnson, A., Kelly, Kummerow, McBlair, McLean, Monroe, Moore, Neel, Norland, Olson, Parsons, Phelps, Plymale, Ratty, Rinehart, Schapiro, Shepard, Sloan, Taylor, Thwaites, Van Steenbergen, Walch, Wedberg, Wilson, Zedler, J., Zedler, P.

Chair: Bernstein

Professors: Alfred, Archibald, Barnett, Bernstein, Berta, Bizzoco, Breindl, Buono, Chen, Davis, R., Dexter, Dowler, Ebert, Fisher, Frey, Glembocki, Hemmingsen, Hurlbert, Johnson, G., Johnson, K., Krekorian, Krisans, McClenaghan, Oechel, Paolini, Perrault, Phleger, Pozos, Rayle, Sabbadini, R., Simpson, Tsoukas, Williams, S., Zyskind

Associate Professors: Avila, Daugherty, Hanscom, Harris, McGuire, Williams, K.

Assistant Professors: Burgin, Burns, Deutschman, Diffendorfer, Reeder, Segall

Lecturers: Garver, Martin, Sabbadini, G., Shubeita

Offered by the Department

Doctor of Philosophy degree in biology and ecology.

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 medical technology and public health microbiology.

Program of study in biology in preparation for the single subject teaching credential in science.

Minor in biology.

Certificate in Recombinant DNA Technology.

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 institu-

tions 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 Recombinant DNA Technology Certificate. The purpose of this program is to prepare undergraduate and graduate students for employment in public and private organizations utilizing recombinant DNA technology.

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 Medical Technology and Public Health Microbiology prepares students to become, after a postgraduate internship, licensed medical technologists or certified public health microbiologists.

Biology Major

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 04011)

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 45 upper division units must be taken, of which 24 must be selected from the General Biology Degree Requirements and the list of courses acceptable for electives. No more than 48 units in biology courses can apply to the degree.

A minor is not required with this major.

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Biology Major

With the B.S. Degree in Applied Arts and Sciences (Major Code: 04011)

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 total of 36 upper division units must be selected from the General Biology Degree Requirements and the list of courses acceptable for electives.

A minor is not required with this major.

General Biology Degree Requirements

Preparation for the Major. Biology 201, 202, and 215; Chemistry 200, 201, and 231 or 232 and 232L; Mathematics 121 and 122; Physics 180A, 180B, 182A, 182B. (39 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 24 upper division units for the B.A. degree or 36 upper division units for the B.S. degree to include Biology 352, 354, 366, 366L, and Chemistry 365. Elective courses include all upper division biology courses numbered 350 and above, Oceanography 541, and all upper division chemistry courses (except Chemistry 499, 560A-560B). 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, 462/462L, 472, 515, 520, 523, 524, 525, and 533.

No transfer course will substitute for Biology 352, 354, 366, or 366L, Chemistry 365 or for the organismal level requirement without the specific approval of the department.

All courses not included above must have specific approval of the department.

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 Admissions and Records.

Emphasis in Cellular and Molecular Biology

Preparation for the Major. Biology 201, 202, and 215; Chemistry 200, 201, and 231 or 232 and 232L; Mathematics 121 and 122; Physics 180A, 180B, 182A, 182B. (39 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units to include Biology 350, 352, 354, 366, 366L, 467, Chemistry 365 and 467L, and at least 11 units of electives selected from Biology and Chemistry 496 and/or 596 (maximum 3 units), Biology and/or Chemistry 499 (maximum 3 units),

Biology 521, 521L, 549, 551, 551L, 554, 555, 556, 557, 563, 569, 570, 575, 584, 585, 590, 595, and Chemistry 431. Approval of the Emphasis in Cellular and Molecular Biology adviser is required for credit in Biology and 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 Admissions and Records.

Other than Biology 352, 354, 366, 366L and Chemistry 365, only one course in this emphasis may be used for credit in another emphasis offered by the department.

No transfer course will substitute for Biology 352, 354, 366, 366L, 467 or Chemistry 365 and 467L without the approval of the Emphasis in Cellular and Molecular Biology adviser.

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 Admissions and Records.

Emphasis in Ecology

Preparation for the Major. Biology 201, 202, and 215; Chemistry 200, 201, and 231 or 232 and 232L; Mathematics 121 and 122; Physics 180A, 180B, 182A, 182B. A computer programming course (e.g. Computer Science 106 or 107) is recommended. (39 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

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 359, 496 and/or 596 (maximum 3 units), 499 (maximum 3 units), 507 (maximum 6 units), 511, 512, 517, 519, 527, 538, 539, 540, 545, 560, 563, 597A, and 597B. At least one of the above electives must be a laboratory course. The remaining units must include an organismal level course selected from Biology 350, 462 and 462L, 472, 515, 520, 523, 524, 525, and 533. Other electives include all biology courses numbered 350 and above (except Biology 452), Oceanography 541, and all upper division chemistry courses (except Chemistry 499, 560A-560B). Approval of the Emphasis in Ecology adviser is required for credit in Biology 496, 499, 507, 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 Admissions and Records.

Other than Biology 352, 354, 366, 366L, and Chemistry 365, only one course in this emphasis may be used for credit in another emphasis offered by the department.

No transfer course will substitute for Biology 352, 354, 366, 366L, or Chemistry 365 without the approval of the Emphasis in Ecology adviser.

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 Admissions and Records.

Emphasis in Evolution and Systematics

Preparation for the Major. Biology 201, 202, and 215; Chemistry 200, 201, and 231 or 232 and 232L; Mathematics 121 and 122; Physics 180A, 180B, 182A, 182B. (39 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units to include Biology 352, 354, 366, 366L, Chemistry 365, and at least 12 units of electives selected from Biology 496 and/or 596 (maximum 3 units), 499 (maximum 3 units), 462, 462L, 472, 508, 512, 515, 520, 521, 521L, 523, 524, 525, 529, 530, and 531. Two of the above electives must be laboratory courses, one of which must be an organismic level course selected from Biology 462/462L, 472, 515, 520, 523, 524 or 525. Other electives include all biology courses numbered 350 and above (except Biology 452), Oceanography 541, and all upper division chemistry courses (except Chemistry 499, 560A-560B). Approval of the

Emphasis in Evolution and Systematics adviser is required for credit in Biology 496, 499, 507, 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 Admissions and Records.

Other than Biology 352, 354, 366, 366L, and Chemistry 365, only one course in this emphasis may be used for credit in another emphasis offered by the department.

No transfer course will substitute for Biology 352, 354, 366, 366L, or Chemistry 365 without the approval of the Emphasis in Evolution and Systematics adviser.

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 Admissions and Records.

Emphasis in Marine Biology

Preparation for the Major. Biology 201, 202, and 215; Chemistry 200, 201, and 231 or 232 and 232L; Mathematics 121 and 122; Physics 180A, 180B, 182A, 182B. (39 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

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), 499 (maximum 3 units), 507, 512, 513, 515, 517, 519, 520, and Oceanography 541. At least two of the above electives must be laboratory courses, at least one of which must be one of the organismal courses Biology 515 or 520. The remaining units must be selected from biology courses numbered 350 and above (except Biology 452), all upper division chemistry courses (except Chemistry 499, 560A-560B), and may include three units selected from Economics 454, Geography 504, Geological Sciences 540, 545, Oceanography 561. Approval of the Emphasis in Marine Biology adviser is required for credit in Biology 496, 499, 507, 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 Admissions and Records.

Other than Biology 352, 354, 366, 366L, and Chemistry 365, only one course in this emphasis may be used for credit in another emphasis offered by the department.

No transfer course will substitute for Biology 352, 354, 366, 366L, or Chemistry 365 without the approval of the Emphasis in Marine Biology adviser.

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 Admissions and Records.

Emphasis in Zoology

Preparation for the Major. Biology 201, 202, and 215; Chemistry 200, 201, and 231 or 232 and 232L; Mathematics 121 and 122; Physics 180A, 180B, 182A, 182B. (39 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

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), 499 (maximum 3 units), 462, 462L, 515 (invertebrate group), 472, 512, 520, 523, 524, 525 (vertebrate group), 527, 560, 577, 588 (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 462/462L, 472, 515, 520, 523, 524, or 525. The remaining units must be selected from biology courses numbered 350 and above (except Biology 452), Oceanography 541, and all upper division chemistry courses (except Chemistry 499, 560A-560B). Approval of the Emphasis in Zoology adviser is required for credit in

Biology 496, 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 Admissions and Records.

No transfer course will substitute for Biology 352, 354, 366, 366L, or Chemistry 365 without the approval of the Emphasis in Zoology adviser.

Other than Biology 352, 354, 366, 366L, and Chemistry 365, only one course in this emphasis may be used for credit in another emphasis offered by the department.

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 Admissions and Records.

Microbiology Major

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 04111)

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 201, 202, and 215; Chemistry 200, 201, and 231 or 232 and 232L; Mathematics 121 and 122; Physics 180A, 180B, 182A, 182B. (39 units)

Foreign 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. It is recommended that students select French, German or Russian to satisfy this requirement. Refer to section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 26 upper division units to include Biology 350, 352, 354, 366, 366L, 521L, 549, Chemistry 365 and 467L.

No transfer course will substitute for Biology 352, 354, 366, 366L, or Chemistry 365, 467L without the specific approval of the Microbiology adviser.

All courses not included above must have the prior approval of the Microbiology adviser and be filed with the Office of Admissions and Records.

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 Admissions and Records.

Microbiology Major

With the B.S. Degree in Applied Arts and Sciences (Major Code: 04111)

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 201, 202, and 215; Chemistry 200, 201, and 231 or 232 and 232L; Mathematics 121 and 122; Physics 180A, 180B, 182A, 182B. (39 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units to include Biology 350, 352, 354, 366, 366L, 467, 521 or 584, 521L, 549, Chemistry 365, 467L, and at least two units of electives selected from Biology and Chemistry 496 and 596 (maximum 3 units), Biology and Chemistry 499 (maximum 3 units), Biology 521, 521L, 551, 551L, 554, 555, 556, 557, 569, 584, 585, 590, 595, and Chemistry 431. Approval of the Microbiology

adviser is required for credit in Biology 496, 499, 596, and other courses not listed above to be included in the electives. This approval must be filed with the Office of Admissions and Records.

No transfer course will substitute for Biology 352, 354, 366, 366L, 467 or Chemistry 365 and 467L without the approval of the Microbiology adviser.

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 Admissions and Records.

Emphasis in Medical Technology and Public Health Microbiology

The emphasis in medical technology and public health is a program of required and elective courses which prepares students for the Public Health Microbiologist and Clinical Laboratory Technologist academic certification and licensing examinations.

Preparation for the Major. Biology 201, 202, and 215; Chemistry 200, 201, and 231 or 232 and 232L; Mathematics 121 and 122; Physics 180A, 180B, 182A, 182B. (39 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved courses with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units to include Biology 350, 352, 354, 366, 366L, 485 or 585, 521L, 549, 582, 584, Chemistry 365, 467L, and at least one course selected from Biology 521, 551, 551L, 554, 555, 556, 557, 569, 586, 588, 590, 595, Chemistry 431, 467L. 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 Admissions and Records.

No transfer course will substitute for Biology 352, 354, 366, 366L, or Chemistry 365 and 467L without the approval of the Microbiology adviser.

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 Admissions and Records.

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)

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 (PRAXIS and SSAT), 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 436, 452, 533, 590, Oceanography 541, and at least one course from Biology 462 and 462L, 472, 515, 520, 523, 524, or 525 (it is recommended that Biology 499 and Chemistry 467L be included if the major is being sought); (2) earning a B or better in Biology 452, (3) completing Astronomy 101, Geological Sciences 100 and 101. 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 Admissions and Records.

All courses not included above must have the prior approval of the Department and the substitution filed with the Office of Admissions and Records.

Biology Minor

Biology 100 and 100L or 202 are prerequisites to the biology minor and do not count towards the units in the minor; some areas include additional prerequisites not counted towards the minor.

The minor in biology consists of a minimum of 16-22 units to include Biology 201 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 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.

Animal Behavior

Required: Biology 527. Electives: Biology 307, 324, 339, 354, 354L, 462, 507, 524, Anthropology 500 and Psychology 417. (16 units)

Biology for Physiological Psychology

Required: Biology 321, 336, 436, 570. Electives: Biology 307 or 339. At least one college course in chemistry is strongly recommended to complement this minor. (16 units)

Cell Biology and Genetics

Prerequisites: Chemistry 200, 201, 231, 365. Electives: Biology 350, 352, 366L, 467, 521, 521L, 549, 563, and 590. (16 units)

Ecology

Required: Biology 354. Electives: Biology 315, 324, 327, 339, 350, 354L, 359, 462, 462L, 513, 539, and 540. (16 units)

Elementary Education

Required: Biology 315, 336, 436, at least two units of Biology 499, and a minimum of two units of electives selected from any upper division biology course. A college level course in chemistry is strongly recommended to complement this minor. (17 units)

Evolutionary Biology

Required: Biology 319 or 352. Electives: Biology 359, 462, 462L, and 510. (16 units)

Human Biology

Required: Biology 336 and a course in college chemistry, or Biology 261 or 590. Electives: Biology 212, 307, 321, 326, 352, 577, and 590. (16 units)

Marine Biology

Required: Biology 515 or 520. Electives: Biology 324, 513, 515, 517, 519, 520, and 524. (16 units)

Plant Biology

Required: Biology 533. Electives: Biology 326, 530, and 563. (16 units)

Secondary Education

Prerequisite: College level course in statistics. Required: Biology 452. Electives (at least one course from each group): Biology 336, 560, 590; Biology 354; Biology 533; Biology 462 and 462L, 520, 524, 525 or 527. Basic courses in genetics, microbiology, and organic chemistry are recommended. (19-22 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 at San Diego State University.

Recombinant DNA Technology Certificate

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 and Biology 551 and 551L with grades of B or better.

The certificate requires 19 prerequisite units – Biology 350, 366, 366L, 467, Chemistry 365, 467L, and 16 certificate units – Biology 498 or 499 (5 units as approved by the certificate adviser), 551, 551L, and two electives selected from Biology 549, 569, or 585. Biology 551 and 551L must be taken at San Diego State University, either in residence or through Open University. Prerequisite and certificate courses may be utilized in the biology, chemistry, and microbiology majors and minors as appropriate.

Courses in the certificate may not be counted toward the minor.

Courses

LOWER DIVISION COURSES

100. General Biology (3) I, II

Prerequisite recommended: Concurrent registration in Biology 100L.

A beginning course in biology stressing processes common to living organisms. Not open to biological sciences majors; see Biology 201, 202.

100L. General Biology Laboratory (1) I, II

Three hours of laboratory.

Prerequisite: Credit or concurrent registration in Biology 100.

A laboratory course in biology stressing processes common to living organisms. Not open to biological sciences majors; see Biology 201, 202.

101. World of Animals (3)

Animal adaptation and diversity and their relationship to the development of evolutionary theory. Not open to biological sciences majors.

101L. World of Animals Laboratory (1)

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 open to biological sciences majors.

200. Concepts in Biology (3) I

Two lectures and one hour of discussion.

Prerequisite: First semester freshman standing.

Concepts and emphases of modern biology to include nature and methods of science, relationship between structure and function, homeostasis, genetic continuity, evolution, systematics and ecology. Designed for and enrollment limited to first semester freshmen whose preparation for the major includes Biology 201. Students with credit in Biology 200 and 201 will receive a total of four units toward a degree.

201. Principles of Organismal Biology (4) I, II

Three lectures and three hours of laboratory.

Prerequisite: Satisfaction of the English Placement Test requirement.

Principles of biology covering 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 the endangerment of a species.

202. Principles of Cell and Molecular Biology (4) I, II

Three lectures and three hours of laboratory.

Prerequisite: Chemistry 200.

Principles of biology applying to all organisms, including cell structure, membrane transport, energy metabolism, cell division, classical and molecular genetics, recombinant DNA, population genetics, mechanisms of evolution, and the basis of classification.

210. Fundamentals of Microbiology (4) I, II

Two lectures and six hours of laboratory.

Prerequisites: Biology 202; or Biology 100, Chemistry 100 and 130.

For nursing and foods and nutrition majors. Study of microorganisms of the environment, including disease-producing organisms, their actions and reactions. Not open to biological sciences majors; see Biology 350.

212. Human Anatomy (4) I, II

Two lectures and six hours of laboratory.

Prerequisite: Biology 100 or 202.

Gross and microscopic anatomy of organ system of human body. (Formerly numbered Biology 150.)

215. Biostatistics (3) I, II

Two lectures and three hours of laboratory.

Prerequisites: Biology 201 and credit or concurrent registration in Mathematics 121 or 140.

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; Civil and Environmental Engineering 160; Economics 201; Political Science 201; Psychology 270; Sociology 201; Statistics 119, 250. Same course as Biology 216-216L.

224. Marine Topics at Sea World (1) (Offered only in Extension)

Prerequisite: College course in biology.

Marine topics of current interest. May be repeated with different topic and consent of instructor for maximum credit four units. See Extension catalog for specific content.

246. Colloquium in Biomedical Sciences (1) II

Prerequisite: University level biology course.

Current biomedical research projects ranging from cell biology to behavioral research. Research paper required. Maximum credit two units.

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.

250. Preprofessional Topics (1) Cr/NC

A. Topics in Medicine.

B. Topics in Dentistry.

C. Topics in Veterinary Medicine.

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.

252. Biomedical Research (2) Cr/NC

Prerequisites: Biology 200, Chemistry 105, and consent of instructor.

Current techniques used in DNA research and in scientific writing skills related to laboratory experience.

261. Human Physiology (4) I, II

Three lectures and three hours of laboratory.

Prerequisites: Chemistry 100; Biology 100 or 202, 212; credit or concurrent registration in Chemistry 130.

Human function viewed from cellular through organ system levels of organization. Intended primarily for prenursing students. Not open to biological sciences majors or students with credit in Biology 336, 436, or 590.

277. Medical Terminology (2)

Prerequisite: Biology 201.

Words and word components used in medical and allied medical practice translated, investigated, and applied.

291. Biology Laboratory (1) I, II

Prerequisites: Recommendation by department and consent of instructor.

Special course to allow makeup of program laboratory deficiencies. Student will be assigned to a laboratory section of the appropriate course.

- A. Laboratory for Biology 201.
- B. Laboratory for Biology 202.
- C. Laboratory for Biology 215.

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.

299. Special Study (1-2)

Individual research experience and interaction with researchers at an introductory level. Projects involve approximately 45 hours of laboratory or fieldwork per unit and a research report. Hours are flexible and arranged between the student and the researcher. Maximum credit four units.

**UPPER DIVISION COURSES
(Intended for Undergraduates)**

Writing Requirements: Completion of the English Placement Test and Writing Competency requirements is a prerequisite for all upper division biology courses numbered 350 and above.

307. Biology of Sex (3) I, II, S

Prerequisite: Completion of the General Education requirement in Foundations 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.

315. Ecology and Human Impacts on the Environment (3)

Prerequisite: Completion of the General Education requirement in Foundations II.A. Natural Sciences and Quantitative Reasoning. 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.

318. The Origins of Life (3)

Prerequisite: Completion of the General Education requirement in Foundations II.A. Natural Sciences and Quantitative Reasoning. A college level course in chemistry or physics. 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.

Theories of chemical evolution with emphasis on multidisciplinary aspects involving geology, geochemistry, cosmochemistry and molecular biology. Not applicable to biological sciences majors. (Formerly numbered Natural Science 431.)

319. Evolution (3)

Prerequisite: Completion of the General Education requirement in Foundations 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.

Modern theory of organic evolution with emphasis on processes involved as they relate to past, present, and future evolution of mankind. Not applicable to biological sciences majors; see Biology 352.

321. Human Heredity (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations 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.

Selected principles of human inheritance with emphasis on relationships to other fields of human studies. Not applicable to biology or microbiology majors; see Biology 352.

324. Life in the Sea (3)

Prerequisite: Completion of the General Education requirement in Foundations 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.

326. Plants, Medicines, and Drugs (3)

Prerequisite: Completion of the General Education requirement in Foundations 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. (Formerly numbered Biology 362.)

327. Conservation of Wildlife (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations 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 and biodiversity. Not applicable to biological sciences majors. (Formerly numbered Biology 454.)

336. Principles of Human Physiology (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations 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.

339. Sociobiology (3)

Prerequisites: Biology 100 or 101 or Anthropology 102 or Psychology 101, and completion of the General Education requirement in Foundations II.A.2. Life Sciences.

Biological bases of social behavior in animals with emphasis on altruism, aggression, territoriality, mating systems, mate choice, parental care, communication, cooperative hunting, and predator avoidance. Not applicable to biological sciences majors.

340A. Preventive Dentistry Program (1-2) Cr/NC

Four hours of clinical and other activities per unit.

Prerequisites: Upper division standing and active pre dental 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.

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 four units. Not applicable to biological sciences majors.

341. The Human Body (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations 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, exercise and nutritional sciences, or biological sciences majors, or to students with credit in any college level human physiology or anatomy course.

348. Health Professions Internship (1)

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.

350. General Microbiology (4) I, II

Two lectures and six hours of laboratory.

Prerequisites: Biology 201, 202, and 215; Chemistry 231.

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.

352. Genetics and Evolution (3) I, II

Prerequisites: Biology 201, 202, and 215.

Principles of transmission genetics, population genetics, and evolution.

354. Ecology and the Environment (3) I, II

Prerequisites: Biology 201, 215; and Mathematics 122

Fundamental concepts in population, community, and ecosystem ecology.

354L. Experimental Ecology (2)

One hour of discussion and three hours of laboratory.

Prerequisite: Credit or concurrent registration in Biology 354.

Methods of research in ecology; approaches to analysis of populations, communities, and ecosystems.

359. Endangered and Extinct Species (3)

Prerequisite: Biology 201.

Examination of reasons that some plants and animals become rare, endangered and extinct. Emphasis on human activities as pressure that often leads to extinction.

366. Biochemistry, Cell and Molecular Biology II (4)

Prerequisite: Chemistry 365.

Concepts of modern integrated molecular biology, cell biology, and biochemistry. Not open to students with credit in Biology 356.

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. Not open to students with credit in Biology 356. (Formerly numbered Biology 365L.)

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.

440. Laboratory Techniques in Molecular Genetics (3)

Prerequisites: Biology 350 or 366L and consent of instructor. Recommended: Biology 549.

Laboratory methods in molecular genetics; experimental design, basic approaches to research problems in molecular genetics; students design and carry out projects under direction of instructor. Maximum combined credit six units for Biology 440 and 499.

450. Development of Modern Biology (3)

Prerequisites: Biology 201 and 202.

History of development of modern biology stressing integration, organizing and understanding of modern topics or evolution genetics and developmental biology.

452. Science Concept Development and Integration (3)

Two lectures and three hours of activity.

Prerequisite: Senior standing, or participation in a life sciences 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.

461. Underwater Research Methods and Techniques (3)

Two lectures and three hours of laboratory.

Prerequisites: Biology 201 and Exercise and Nutritional Sciences 323 or Oceanography 306, and three upper division units in biology, Advanced Openwater or Scientific Scuba Diving Certification, diving skills proficiency evaluation, acceptable openwater diving equipment, medical examination, approval for scuba diving and waiver for scuba diving.

Preparation for scientific research underwater; scientific methods, techniques, operations and specialized equipment; scientific diver training and certification requirements; diving procedures and regulations; diving equipment; diving physiology hyperbaric conditions, fitness, practical diving skills, safety and emergency procedures.

462. Entomology (3)

Prerequisite: Biology 201.

Morphological and behavior adaptations, natural history, and overall importance of insects.

462L. Entomology Laboratory (1)

Three hours of laboratory.

Prerequisite: Credit or concurrent registration in Biology 462.

External and internal structure of insects; insect classification.

465. Field Orientation in Environmental Health (1)

Forty hours of fieldwork.

Prerequisites: Biology 350 and consent of Environmental Health Adviser.

Five days accompanying Environmental Health Specialists of the San Diego County Department of Health Services on their field rounds. Open only to Environmental Health majors.

467. Biochemistry, Cell and Molecular Biology III (4)

Prerequisite: Biology 366.

Advanced concepts of modern integrated cell biology, molecular biology and biochemistry. Not open to students with credit in Biology 550.

472. Natural History of Vertebrates (4)

Two lectures and six hours of laboratory.

Prerequisite: Biology 201. Recommended: Biology 352.

Evolution and natural history of vertebrates, especially species of Southern California including use of keys for identifying vertebrates and tools for studying vertebrates in the field and laboratory.

474. Histology (4)

Two lectures and six hours of laboratory.

Prerequisite: Biology 201. Recommended: Biology 212.

Descriptive microscopic anatomy of cells, tissues and organs of mammals with special emphasis on humans.

485. Principles of Immunology (3)

Prerequisite: Biology 202.

Basic areas of immunology to include inflammation, generation of immune response, antibody production, lymphocyte development and function, hypersensitivities and AIDS, major histocompatibility complex and cytokines. Designed to give a basic background in the immune system.

490. Undergraduate Honors Research (3)

Prerequisites: Upper division standing with GPA of at least 3.20, four units of Biology 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 six units.

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.

498. Laboratory Experience in Modern Industrial Technology (1-5) Cr/NC I, II

Up to 20 hours per week in academic year, 40 hours per week in summer or winter sessions.

Prerequisites: Fifteen upper division units in biological sciences with grades of A or B and consent of instructor.

Practical laboratory experience in local industrial or SDSU campus laboratories emphasizing current technology. Maximum credit five units applicable to Recombinant DNA Technology certificate. Does not apply to biological sciences majors.

499. Special Study (1-3) I, II

Prerequisites: Upper division status in good standing and consent of instructor.

Individual research experience and interaction with researchers, on or off campus. Projects involve a total of approximately 45 hours of laboratory or fieldwork per unit and a research report. Hours are flexible and arranged between student and researcher. Maximum credit six units. Maximum six units applicable to the biology major for any combination of Biology 499, and Chemistry 499. Maximum three units applicable to the microbiology major or environmental health major for any combination of Biology 499 and Chemistry 499.

UPPER DIVISION COURSES (Also Acceptable for Advanced Degrees)

Writing Requirements: Completion of the English Placement Test and Writing Competency requirements is a prerequisite for all upper division biology courses numbered 350 and above.

507. Topics in Ecology (2-4)

Two or three lectures and 0 to 6 hours of laboratory.

Prerequisite: Biology 354 and as may be indicated in the Class Schedule.

Treatment of particular advanced aspects of ecology not covered in regular courses, including insect ecology, intertidal ecology, and ecology of the Colorado River Delta. See Class Schedule for specific content. Maximum credit six units. (Topics formerly offered under Biology 506 and 516.)

508. Coevolution (3)

Prerequisites: Biology 352 and 354.

Coevolution in interspecific interactions, like herbivory, predation, parasitism, competition, pollination, and mimicry.

510. Evolutionary Mechanisms (3)

Two lectures and three hours of laboratory.

Prerequisite: Biology 352.

Concepts in population genetics, quantitative genetics, adaptation, speciation, and macroevolution required to understand the mechanisms of evolution.

511. Conservation Genetics (3)

Prerequisite: Biology 352.

Application of population genetics concepts and techniques to conservation of endangered species, restoration, and management of genetic resources.

512. Evolution and Ecology of Marine Mammals (3)

Two lectures and three hours of laboratory.

Prerequisites: Biology 352 and 354.

Biology of marine mammals to include pinniped, cetacean and sirenian evolution, diet and foraging strategies, social organization, reproductive strategies, echolocation, diving physiology, and conservation.

513. Marine Microbiology (2)

Prerequisites: Biology 350 or an introductory course in microbiology and consent of instructor.

Microbiological population of estuary and ocean waters; interrelationships with other organisms and the physical and chemical environment.

515. Marine Invertebrate Biology (4)

Two lectures and six hours of laboratory.

Prerequisite: Biology 201.

Structure and function, ecology, behavior, physiology and phyletic relationships of marine invertebrate animals.

517. Marine Ecology (4)

Two lectures and six hours of laboratory.

Prerequisite: Biology 354 or 515.

Ecological concepts as applied to pelagic and benthic marine organisms and their environment. Field and laboratory experience in oceanographic techniques, particularly the coastal environment.

519. Aquaculture (3)

Prerequisite: Biology 201.

Principles and practices of the farming of aquatic organisms.

520. Ichthyology (4)

Two lectures and six hours of laboratory.

Prerequisite: Biology 201.

Identification, systematics, evolution, structure, physiology, behavior and ecology of fishes.

521. Advanced General Microbiology (2)

Prerequisites: Biology 350 or an introductory course in microbiology and consent of instructor.

Taxonomy, comparative physiology and ecology of representative microorganisms found in various natural environments.

521L. Advanced Microbiology Laboratory (3)

One lecture and six hours of laboratory.

Prerequisites: Biology 350, 366, 366L, and credit or concurrent registration in Biology 521 or 584. Strongly recommended: Credit or concurrent registration in an upper division writing course.

Procedures and methods for isolation, characterization and identification of prokaryotes from soil, water and humans; includes both pathogenic and non-pathogenic prokaryotes.

523. Herpetology (4)

Three lectures and three hours of laboratory.

Prerequisite: Biology 201. Recommended: Biology 352.

Evolution, systematics, distribution, and ecology of amphibians and reptiles of the world.

524. Ornithology (4)

Two lectures, six hours of laboratory or field excursions, and a field project.

Prerequisite: Biology 201.

Study and identification of birds, especially those of the Pacific Coast and the San Diego region.

525. Mammalogy (4)

Two lectures and six hours of laboratory.

Prerequisite: Biology 201.

Evolution, systematics, distribution and ecology of mammals of the world.

527. Animal Behavior (4)

Three lectures and three hours of laboratory.

Prerequisites: Biology 215; Biology 201 or Psychology 211 and 260 for psychology majors.

Biological bases of animal behavior with emphasis on the ethological approach, including the evolution and adaptive significance of behavior.

529. Molecular Methods in Ecology and Evolution (3)

Prerequisites: Biology 352 and Chemistry 365.

Molecular methods used in ecology and evolutionary biology with emphasis on types of questions addressed using such methods and data analysis.

530. Plant Systematics (4)

Two lectures and six hours of laboratory, field trips.

Prerequisite: Biology 201.

Plant description, identification, classification, and nomenclature with emphasis on evolutionary patterns, interdisciplinary data acquisition, and phylogenetic analysis.

531. Taxonomy of California Plants (4)

Two lectures and six hours of laboratory.

Prerequisite: Biology 201.

Fundamentals of plant taxonomy with emphasis on identification of plants native and naturalized to California. Plant collecting techniques. Field trips are required.

533. Plant Structure and Function (3)

Two lectures and three hours of laboratory.

Prerequisite: Biology 201.

Relationships between plant structure and function. Morphology and anatomy of vascular plants considering specific function of plant organs. Approaches to solve plant morphological problems. Techniques of plant anatomy.

535. Plant Ecology (4)

Three lectures and three hours of laboratory.

Prerequisite: Biology 201.

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.

538. Environmental Policy and Regulations (3)

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.

539. Restoration Ecology (3)

Two lectures and three hours of laboratory.

Prerequisite: Biology 354.

Ecological concepts pertaining to the restoration of disturbed ecosystems, including plant establishment, stability of man-made ecosystems, below-ground biota, mineral cycling, succession, and other organisms and processes on disturbed lands.

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.

545. Limnology (4)

Three lectures and three hours of laboratory.

Prerequisite: Biology 354.

Biological, chemical, and physical considerations of inland waters.

549. Microbial Genetics and Physiology (3)

Prerequisite: Biology 350 or 366.

Physiology of microbial growth, bacterial structure and function, genetics of bacteriophages and bacteria.

550. Eukaryotic and Prokaryotic Molecular Biology (4)

Prerequisites: Biology 352, 366, and Chemistry 365.

Gene structure, organization, and regulation in prokaryotes and eukaryotes. Mechanisms of RNA and protein synthesis. Dynamic aspects of the genome.

551. Recombinant DNA (3) I, II

Prerequisites: Biology 350 and either 467 or 352 and 356.

Theory and practice of recombinant DNA techniques.

551L. Recombinant DNA Laboratory (2)

Six hours of laboratory.

Prerequisites: Biology 350 and 549, or Biology 467 and Chemistry 366L.

A laboratory course in recombinant DNA techniques.

554. Molecular Virology (2)

Prerequisites: Biology 350 and 467.

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.

555. Principles of Electron Microscopy (1)

Prerequisites: Biology 201 and Physics 180B.

Principles of scanning and transmission electron microscopy including theoretical basis of sample preparation. (Formerly numbered Biology 593.)

556. Scanning Electron Microscopy Laboratory (2)

Six hours of laboratory.

Prerequisite: Credit or concurrent registration in Biology 555.

Biological specimen preparation and operation of scanning electron microscope. (Formerly numbered Biology 593.)

557. Transmission Electron Microscopy Laboratory (3)

One lecture and six hours of laboratory.

Prerequisite: Credit or concurrent registration in Biology 555.

Biological sample preparation and operation of transmission electron microscope.

560. Animal Physiology (3)

Prerequisites: Biology 201 and 202; 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.

561. Radiation Biology (3)

Prerequisites: Biology 100 or 201 and 202; 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.

561L. Radiation Biology Laboratory (2)

Six hours of laboratory.

Prerequisite: Credit or concurrent registration in Biology 561.

The laboratory determination of the effects of ionizing radiation on biological systems.

563. Plant Physiology (3)

Prerequisites: Biology 201, 366L, and Chemistry 365.

Activities of plants, including photosynthesis, ion transport, translocation, water relations, growth and development.

569. Molecular Pharmacology (3)

Prerequisite: Biology 366.

Molecular mechanisms of drug action emphasizing pharmacokinetics, drug-receptor theory, signal transduction, physiological effects of drugs on nervous cardiovascular and endocrine systems. Includes discussion of molecular approaches to rational drug design, development, and testing in the pharmaceutical industry.

570. Neurobiology (3)

Prerequisite: Biology 366 or 590 or Psychology 260.

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.

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.

577. Embryology (4)

Two lectures and six hours of laboratory.

Prerequisites: Biology 201 and 202.

Studies in comparative gametogenesis, morphogenesis, and reproductive physiology.

582. Hematology (2)

One lecture and three hours of laboratory.

Prerequisite: Biology 350.

Study of normal and pathological blood with chemical, physical and microscopic methods.

584. Medical Microbiology (2)

Prerequisites: Biology 350 and Biology 356 or 366.

Discussion of major bacterial and viral pathogens; molecular mechanisms of pathogenesis, microbial toxins and antimicrobial agents; immune response to microbial infections; biochemical and molecular diagnostics.

585. Cellular and Molecular Immunology (3)

Prerequisites: Biology 366. Recommended: Credit or concurrent registration in Biology 467 and Chemistry 467L.

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.

586. Medical Entomology (4)

Three lectures and three hours of laboratory.

Prerequisite: Biology 201.

Role of insects and other arthropods in the transmission and causation of human diseases and the important diseases of domesticated animals.

588. Parasitology (4)

Two lectures and six hours of laboratory.

Prerequisite: Biology 201.

Study of animal parasites with special reference to those of humans. Laboratory including identification of important human parasites, and collection and preservation of local forms.

590. Physiology of Human Systems (4)

Three lectures and one hour of discussion.

Prerequisites: Biology 201 and 202; Physics 180B, 182A, 182B. Recommended: Biology 366 or Chemistry 365.

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.

592. Cell and Molecular Biology Laboratory (2)

Six hours of laboratory.

Prerequisite: Biology 350.

Laboratory course in advanced techniques in microbiology and cell and molecular biology.

595. Computers in Biomedical Research (3)

Prerequisite: Biology 366 or 590. Recommended: Computer Science 107.

Application of micro- and minicomputers to tasks encountered by biomedical scientists in research laboratories (data acquisition and reduction, experiment control) and by physicians in medical care delivery (noninvasive imaging, clinical laboratory automation, patient file processing).

596. Special Topics in Biology (1-3)

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. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree. Additional units acceptable with the approval of the graduate adviser.

597A. Univariate Statistical Methods in Biology (3)

Two lectures and three hours of laboratory.

Prerequisite: Biology 350 or 352 or 354 or 356 or 366.

Application of univariate statistical techniques in biological sciences.

597B. Multivariate Statistical Methods in Biology (3)

(Same course as Statistics 555.)

Two lectures and three hours of laboratory.

Prerequisites: Biology 215, and 350 or 352 or 354 or 467.

Application of multivariate statistical methods in biological sciences.

598. Computational Biology (3)

Prerequisites: Computer Science 205 and consent of instructor.

Methods for analysis of biological systems at all levels of scale from macromolecules to ecosystems. Topics include macromolecular sequence analysis to determine structure and function and study phylogenetic relationships. Imaging in two to four dimensions. Mathematical modeling in biological sciences.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

Business Administration

In the College of Business Administration

OFFICE: Business Administration 448
TELEPHONE: (619) 594-5828
FAX: (619) 594-7046

Faculty

Faculty assigned to teach in Business Administration are drawn from departments in the College of Business Administration.

The Majors

For majors, minors, additional programs and courses in the College of Business Administration, see listings under Accountancy, Finance, Information and Decision Systems, Management, and Marketing.

Business Administration Minor

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 and 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 Undergraduate Program Office (BA 448), (619) 594-5828.

The minor in business administration consists of 21 to 23 units to include Accountancy 201; Finance 323; Information and Decision Systems 180; Management 350; Marketing 370; and six to eight units selected from Finance 327; Management 352, 450; Marketing 371, 373.

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 or in International Business may not complete a minor in the College of Business Administration.

Students must officially declare the minor before taking any upper division business courses. **Students must meet the prerequisites for the minor in effect at the time that they declare the minor.** The current prerequisites for admission to the business administration minor include completion of the following courses with a grade of C or better in each: Economics 101, 102 and a three unit course in statistics (Statistics 119 is recommended); completion of the General Education requirements in Communication and Critical Thinking; completion of an additional nine units in the department of the student's major, including at least three units of upper division courses. Students must also meet the GPA requirement in effect at the time that they declare the minor. Contact the Business Undergraduate Program Office (BA 448) for admissions criteria and procedures.

Courses

UPPER DIVISION COURSE

404. Small Business Administration (3)

Prerequisites: Finance 323; Information and Decision Systems 301 or 302; Management 350; Marketing 370; and consent of instructor.

Counseling of existing small businesses in conjunction with the Small Business Administration. Application of principles from all fields of business administration. Maximum credit six units. (Formerly numbered Information and Decision Systems 404.)

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

Chemistry

In the College of Sciences

OFFICE: Chemistry/Geology 303
TELEPHONE: (619) 594-5595 / **FAX:** (619) 594-4634
EMAIL: office@chemistry.sdsu.edu
WWW: http://www.chemistry.sdsu.edu/chemistry

Accredited by the American Chemical Society.

Faculty

Emeritus: Abbott, Coffey, Grubbs, Hellberg, Isensee, Jensen, Jones, Joseph, Landis, Lebherz, Malik, Mathewson, O'Neal, Richardson, Ring, Spangler, Stewart, Wadsworth, Walba, Woodson

Chair: Chatfield

Professors: Bennett, Cobble, Dahms, Metzger, Roeder, Stumph, Tong

Associate Professors: Chatfield, Cole, Smith

Assistant Professors: Adams, Burke, Grotjahn, Pullman, Walsh

Offered by the Department

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 specialties in analytical, biochemical, inorganic, organic, and physical chemistry.

The Department of Chemistry 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.

Chemistry Major

**With the B.S. Degree in Applied Arts and Sciences
(Major Code: 19051)
and Certificate of the American Chemical Society**

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, 231, 251; Mathematics 150, 151, 252; and Physics 195, 195L, 196, 196L, 197, 197L. (44 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units to include Chemistry 410A-410B, 417, 431, 457, 520A-520B, 550, 560A, one unit of 497, and nine units of upper division electives in chemistry. Six of the nine units may be in related subjects with the approval of the department.

Emphasis in Biochemistry

Preparation for the Major. Chemistry 200, 201, 231, 251; Biology 201, 202; Mathematics 150, 151, 252; Physics 195, 195L, 196, 196L, 197, and 197L. (52 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units to include Chemistry 410A-410B, 431, 457, 550, 560A-560B, 567; Biology 352*; one unit of Chemistry 497 or 498; and eight units selected from Chemistry 520A, 537, 551; Biology 350, 549, 551, 551L, 561, 561L, 563, 569, 570, 585, 590, 595. The addition of Chemistry 520A and 520B qualifies this program for ACS certification.

* Chemistry 560A replaces Chemistry 361A as a prerequisite; Chemistry 410A replaces Biology 215 as a prerequisite.

Chemistry Major

**With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 19051)
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." No more than 48 units in chemistry courses can apply to the degree.

A minor is not required with this major.

Preparation for the Major. Chemistry 200, 201, 231, 251; Mathematics 150, 151, 252; and Physics 195, 195L, 196, 196L, 197, 197L. (44 units)

Foreign 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 section of this catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 24 upper division units in chemistry to include Chemistry 410A-410B, 417, 431, 457, 520A-520B, 550; one unit of Chemistry 497.

NOTE: See following page for recommended sequence of courses for the **B.S. and B.A. Degrees and Certificate.**

OUTLINE FOR THE B.S. DEGREE AND CERTIFICATE

<i>Units</i>			<i>Units</i>		
<i>First year</i>	<i>1st Sem.</i>	<i>2nd Sem.</i>	<i>Second year</i>	<i>1st Sem.</i>	<i>2nd Sem.</i>
Chemistry 200	5	–	Chemistry 231	4	–
Chemistry 201	–	5	Chemistry 251	–	5
† Mathematics 150, 151	5	4	Chemistry 431	–	4
Physics 195, 195L	–	4	Mathematics 252	4	–
Rhetoric and Writing Studies 100 3	–	–	Physics 196, 196L	4	–
Rhetoric and Writing Studies 200 –	–	3	Physics 197, 197L	–	4
Communication 103	3	–	General Education	3	3
	<u>16</u>	<u>16</u>		<u>15</u>	<u>16</u>
<i>Units</i>			<i>Units</i>		
<i>Third year</i>	<i>1st Sem.</i>	<i>2nd Sem.</i>	<i>Fourth year</i>	<i>1st Sem.</i>	<i>2nd Sem.</i>
Chemistry 410A-410B	4	3	Chemistry 417	–	2
Chemistry 560A	3	–	Chemistry 457	2	–
Chemistry Elective	–	4	Chemistry 497	1	–
American Institutions	3	3	Chemistry 520A-520B	3	3
General Education	6	6	Chemistry 550	2	–
	<u>16</u>	<u>16</u>	Chemistry Electives	3	2
			General Electives	–	6
			General Education	6	3
				<u>17</u>	<u>16</u>

† Some students will be required to take Mathematics 104 or 140 or both in their first semester because of failure to qualify on the mathematics placement examination. The appropriate number of units should then be subtracted from General Electives.

OUTLINE FOR THE B.A. DEGREE AND CERTIFICATE

<i>Units</i>			<i>Units</i>		
<i>First year</i>	<i>1st Sem.</i>	<i>2nd Sem.</i>	<i>Second year</i>	<i>1st Sem.</i>	<i>2nd Sem.</i>
Chemistry 200	5	–	Chemistry 231	–	4
Chemistry 201	–	5	Chemistry 251	5	–
† Math. 104, 140, 150	5	5	Mathematics 151, 252	4	4
Physics 195, 195L	–	4	Physics 196, 196L	4	–
Rhetoric and Writing Studies 100 3	–	–	Physics 197, 197L	–	4
Communication 103	3	–	General Education	3	3
General Education	–	3		<u>16</u>	<u>15</u>
	<u>16</u>	<u>17</u>			
<i>Units</i>			<i>Units</i>		
<i>Third year</i>	<i>1st Sem.</i>	<i>2nd Sem.</i>	<i>Fourth year</i>	<i>1st Sem.</i>	<i>2nd Sem.</i>
Chemistry 410A-410B	4	3	Chemistry 417	–	2
Chemistry 431	4	–	Chemistry 457	2	–
American Institutions	3	3	Chemistry 497	1	–
General Education	3	9	Chemistry 520A-520B	3	3
	<u>14</u>	<u>15</u>	Chemistry 550	2	–
			General Electives	4	5
			General Education	3	6
				<u>15</u>	<u>16</u>

† Students eligible to take Mathematics 150 in their first semester should do so and substitute for Mathematics 104 and/or 140 two to five units of general electives.

Chemistry Major

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 19051)

All candidates for a degree in liberal arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." No more than 48 units in chemistry courses can apply to the degree.

Preparation for the Major. Chemistry 200, 201, 231; Biology 201, 202; Mathematics 104, 140, 150, 151, 252; and Physics 195, 195L, 196, 196L, 197, 197L. (52 units)

Foreign 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 section of this catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 24 upper division units in chemistry to include Chemistry 410A-410B, 417, 431, 457, 550, and seven units of electives in chemistry. Chemistry 560A-560B 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.S. Degree in Applied Arts and Sciences (Major Code: 19051)

One of the requirements for acceptance into the College of Education's postbaccalaureate credential program is to either pass the appropriate PRAXIS and SSAT 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 postbaccalaureate 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 with the Cross-Cultural, Language, and Academic Development (CLAD) emphasis must complete the requirements outlined in the catalog under Teacher Education or Policy Studies. Contact the Center for Careers in Education or the Policy Studies in Language and Cross-Cultural Education Department for up-to-date information on prerequisites.

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.

I. Communication and Critical Thinking (9 units)

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

1. Oral Communication (3 units) to be satisfied by Africana Studies 140, Chicana and Chicano Studies 111A, or Communication 103.

2. Composition (3 units) to be satisfied by Africana Studies 120, Chicana and Chicano Studies 111B, or Rhetoric and Writing Studies 100.

3. Intermediate Composition and Critical Thinking (3 units) to be satisfied by Africana Studies 200 or Rhetoric and Writing Studies 200.

II. Foundations (28 units)

A. Natural Sciences and Quantitative Reasoning (13 units):

1. Physical Sciences (6 units) to be satisfied by Chemistry 200 and Physics 180A or 195.

2-3. Life Sciences and Laboratory (4 units) to be satisfied by Biology 201.

4. Mathematics/Quantitative Reasoning (3 units) to be satisfied by Mathematics 150.

B. Social and Behavioral Sciences (6 units).

C. Humanities (9 units):

Complete a course in each of three of the following four areas (1. Literature; 2. Art, Classics, Humanities, Music, and Theatre; 3. Philosophy and Religious Studies; 4. Foreign Language) in the Humanities section of the Foundations component of the regular General Education program. Refer to General Education course offerings in the Graduation Requirements section of the catalog. One semester of a foreign language is recommended.

III. American Institutions

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.

IV. Explorations (9 units)

A. Upper division Social and Behavioral Sciences (3 units). Linguistics 420 is recommended.

B. Upper division Humanities to be satisfied by History 441 (3 units).

C. Upper division Humanities (3 units). A course in cultural diversity is required. Refer to Part C of Explorations under the General Education requirements section in the catalog.

Preparation for the Major. Africana Studies 140, Chicana and Chicano Studies 111A, or Communication 103; Africana Studies 120, Chicana and Chicano Studies 111B, or Rhetoric and Writing Studies 100; Africana Studies 200 or Rhetoric and Writing Studies 200; Astronomy 101, 109; Biology 201, 202; Chemistry 200, 201, 231, 251; Geological Sciences 100, 101; Mathematics 150, 151; Physics 180A, 180B, 182A, 182B and Mathematics 252 **OR** Physics 195, 195L, 196, 196L, 197, 197L. (65 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units to include Chemistry 410A, 410B, 417, 431, 457, 497 (1-3 units), 520A, 550, 560A, 571; Oceanography 541. The remaining four to six units must be selected from Chemistry 499 (with approval of department), 520B, 560B, 567, 596, and Physics 311. This major does not qualify for ACS certification.

Additional Requirements for Subject Matter

Preparation Certification

Satisfactory Grades. At most one course with a C- or lower among the courses listed under Preparation for the Major, and at most one course with a C- or lower among the courses listed under the Major. If a course is repeated, the highest grade will count.

Formative Assessment. Completion of a satisfactory, preliminary portfolio two semesters prior to graduation. Contact the subject matter preparation adviser for information.

Summative Assessment. Completion of a satisfactory, final portfolio, and a positive recommendation from a committee consisting of the senior project supervisor, the Department of Chemistry chair, and the subject matter preparation program adviser with input from the student's upper division laboratory instructors.

Chemical Physics Major

With the B.S. Degree in Applied Arts and Sciences (Major Code: 19081)

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 Admissions and Records.

A minor is not required with this major.

Preparation for the Major. Chemistry 200, 201, 231, 251; Mathematics 150, 151, and 252; Physics 195, 195L, 196, 196L, 197, 197L. (44 units)

Recommended: A course in computer programming.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 46 upper division units to include Chemistry 410A-410B, 431, 457, 520A, 550; Mathematics 342A-342B; Physics 311, 350, 354A-354B, 357, 400A-400B.

Chemistry Minor

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 231 and 251; and six units of upper division electives. Chemistry 410A-410B** are strongly recommended.

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

LOWER DIVISION COURSES

100. Introduction to General Chemistry with Laboratory (4) I, II

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.

105. Preparation for General Chemistry (4) I, II

Three lectures and three hours of laboratory.

Prerequisite: Elementary algebra. Algebra test will be given in first week of class. Students who do not earn a passing grade will be required to drop the course.

Elemental principles of chemistry approached from problem-solving perspective necessary for success in Chemistry 200. Not open to students with credit in Chemistry 100 or 200.

130. Elementary Organic Chemistry (3) I, II

Prerequisite: Chemistry 100, 105, or 200.

Introduction to compounds of carbon including both aliphatic and aromatic substances. Not open to students with credit in Chemistry 230, 231, or 232.

160. Introductory Biochemistry (3) I, II

Prerequisite: Chemistry 130.

Fundamental principles of the chemistry of living processes. This course intended primarily for majors in nursing, nutrition, and related fields.

200. General Chemistry (5) I, II (CAN CHEM 2) (200 + 201: CAN CHEM SEQ A)

Three lectures and six hours of laboratory.

Prerequisites: High school chemistry or a grade of "C" or better in Chemistry 105, and two years of high school algebra.

General principles of chemistry with emphasis on inorganic materials. Students with credit for either Chemistry 100 or 105, and 200 will receive a total of five units of credit toward graduation.

201. General Chemistry (5) I, II (CAN CHEM 4) (200 + 201: CAN CHEM SEQ A)

Three lectures and six hours of laboratory.

Prerequisite: Chemistry 200.

Continuation of Chemistry 200. General principles of chemistry with emphasis on inorganic materials and qualitative analysis.

231. Organic Chemistry (4) I, II

Three lectures and three hours of laboratory.

Prerequisite: Chemistry 201.

Properties and synthesis of organic compounds including reaction mechanisms. First half of a one-year course. Not open to students with credit in Chemistry 232 or 232L.

232. Organic Chemistry (3) I, II

Prerequisites: Chemistry 201 and consent of instructor.

Same course as Chemistry 231 without laboratory. Not open to students with credit in Chemistry 231.

232L. Organic Chemistry Laboratory (1) I, II

Three hours of laboratory.

Prerequisites: Chemistry 201 and consent of instructor.

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.

251. Analytical Chemistry (5) I, II

Three lectures and six hours of laboratory.

Prerequisites: Chemistry 201 and credit or concurrent registration in Mathematics 122 or 150.

Introduction to the theory and practice of analytical chemistry including gravimetric, volumetric, and instrumental methods.

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.

299. Special Study (1-3)

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

UPPER DIVISION COURSES

(Intended for Undergraduates)

361A-361B. Fundamentals of Biochemistry (3-3)

Prerequisites: Chemistry 231. Chemistry 361A or 365 is prerequisite to Chemistry 361B.

The chemistry of intermediary metabolism and its regulation. Not open to students with credit in Chemistry 560A-560B.

365. Biochemistry, Cell and Molecular Biology I (3)

Prerequisites: Biology 202 and Chemistry 231.

Basic concepts of modern integrated biochemistry, cell and molecular biology. Not applicable to chemistry major or minor. Not open to students with credit in Chemistry 361A or 560A.

371. Environmental Chemistry (3)

Prerequisites: One year of general chemistry and Chemistry 231 or 251.

Chemical principles of naturally occurring and polluted air, water, and soil environments.

410A-410B. Physical Chemistry (4-3) I, II

410A: Three lectures and three hours of laboratory.

410B: Three lectures.

Prerequisites: Chemistry 251 and 231; Mathematics 252; and credit or concurrent registration in Physics 197 and 197L. Chemistry 410A is prerequisite to 410B.

Theoretical principles of chemistry with emphasis on mathematical relations. Theory and practice in acquisition and statistical analysis of physical measurements on chemical systems.

417. Advanced Physical Chemistry Laboratory (2) II

Six hours of laboratory.

Prerequisites: Chemistry 410B, 457, and 550.

Experimental physical chemistry. Emphasis on interpretation and statistical evaluation of instrument-derived results, record keeping, report writing, and individual initiative in observing results.

431. Organic Chemistry (4) I, II

Three lectures and three hours of laboratory.

Prerequisite: Chemistry 231.

Continuation of Chemistry 231. Not open to students with credit in Chemistry 432 and 432L.

432. Organic Chemistry (3) I, II

Prerequisites: Chemistry 231 and consent of instructor.

Continuation of Chemistry 231. Same course as Chemistry 431 without laboratory. Not open to students with credit in Chemistry 431.

432L. Organic Chemistry Laboratory (1) I, II

Three hours of laboratory.

Prerequisites: Chemistry 231 and consent of instructor.

Continuation of laboratory portion of Chemistry 231. Not open to students with credit in Chemistry 431.

457. Instrumental Methods of Chemical Analysis Laboratory (2) I

Six hours of laboratory.

Prerequisites: Chemistry 431 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 subdisciplines of chemistry.

467L. Biochemistry, Cell and Molecular Biology Laboratory (2) I, II

Six hours of laboratory.

Prerequisites: Biology 366, 366L, credit or concurrent registration in Biology 467. Recommended: Biology 350.

Intermediate laboratory approaches in biochemistry, cell biology and molecular biology. Not applicable to chemistry major or minor. Not open to students with credit in Biology 592. (Formerly numbered Chemistry 366L.)

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.

497. Senior Laboratory Project (1-4) Cr/NC I, II, S

Prerequisite: Three one-year chemistry courses which have an associated laboratory.

Individual laboratory investigation in analytical, inorganic, organic, or physical chemistry or in biochemistry using advanced laboratory techniques with a final written report of the investigation. Maximum credit six units.

498. Senior Project (1-4) Cr/NC I, II

Prerequisite: Three one-year courses in chemistry.

An individual investigation and report on a problem. Maximum credit six units.

499. Special Study (1-4) I, II

Prerequisite: Consent of instructor. Open only to students who have shown ability to do A or B work in chemistry.

Individual study. Maximum credit six units.

UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)

510. Advanced Physical Chemistry (3)

Prerequisite: Chemistry 410B.

Mathematical tools essential to solving problems in chemical thermodynamics, statistical mechanics, chemical kinetics, quantum chemistry and molecular structure and spectroscopy, with applications.

515. Computational Chemistry (3)

Prerequisites: Chemistry 410A and 410B.

Overview of modern computational chemistry. Use of computational chemistry tools and their application to problems of chemical interest.

520A-520B. Inorganic Chemistry (3-3) I, II

Prerequisite: Credit or concurrent registration in Chemistry 410B. Chemistry 520A is prerequisite to 520B.

Nature of chemical bond and an advanced systematic study of representative and transition elements and their compounds.

530. Theoretical Organic Chemistry (3)

Prerequisites: Chemistry 410A and 431. Recommended: Credit or concurrent registration in Chemistry 410B.

Electronic and physical properties of organic molecules; structure-reactivity correlations: Electronic structure of molecules (qualitative molecular orbital theory); stereochemistry; and linear free energy relationships.

537. Organic Qualitative Analysis (4)

Two lectures and six hours of laboratory.

Prerequisites: Chemistry 431 and credit or concurrent registration in Chemistry 410A. Recommended: Chemistry 417 and 457.

Chemical, physical, and spectral methods discussed and employed to determine structure of organic compounds. Purification and separation techniques stressed.

550. Instrumental Methods of Chemical Analysis (2) I

Prerequisites: Chemistry 431 and credit or concurrent registration in Chemistry 410B; concurrent registration in Chemistry 457 for undergraduate students only.

Theory and application of those instrumental methods of chemical separation and analysis most frequently used in all subdisciplines of chemistry.

551. Advanced Analytical Chemistry (3) II

Prerequisite: Chemistry 550.

Expanded treatment of instrumental methods for separation and quantification not covered in Chemistry 550. Non-instrumental separations, quantitative organic microanalysis, sampling theory and techniques, reaction rate applications and interpretation of experimental data.

552. Chromatographic Separations (1)

Prerequisite: Chemistry 550.

Theory of chemical separations and solvent theory and their application to gas and liquid chromatographic media and capillary electrophoresis, emphasizing practiced methods of analysis.

553. Interpretation of Mass Spectra (1)

Prerequisite: Chemistry 550.

Methods of ionization used to produce mass spectra from atoms and molecules. Interpretation of electron impact mass spectra. Applications to modern methods of elemental analysis and large organic molecules from gas, liquid, and capillary electrophoresis forms of chromatography.

560A-560B. General Biochemistry (3-3) I, II

Prerequisites: Chemistry 431 and credit or concurrent registration in Chemistry 410A.

The structure, function, metabolism, and thermodynamic relationships of chemical entities in living systems. Not open to students with credit in Chemistry 361A-361B.

567. Biochemistry Laboratory (3) I, II

One lecture and six hours of laboratory.

Prerequisite: Chemistry 361A or 560A.

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.

571. Environmental Chemistry (3)

Prerequisites: Chemistry 231 and 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.

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. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

Chicana and Chicano Studies

In the College of Arts and Letters

OFFICE: Adams Humanities 3160
TELEPHONE: (619) 594-6452

Faculty

Chair: Griswold del Castillo

Professors: Griswold del Castillo, Herzog, Ortiz, Rodriguez,

Villarino

Associate Professors: Del Castillo, Hicks

Assistant Professor: de la Luz Ibarra

Offered by the Department

Major in Mexican American studies with the B.A. degree in liberal arts and sciences.

Minor in Mexican American studies.

Minor in United States-Mexican border studies.

Certificate in United States-Mexico border studies.

The Major

Recognized for its commitment to excellence in teaching, research and service, Chicana and Chicano studies provides timely, interdisciplinary education regarding the nation's fast-growing ethnic group, the Chicano/Latino, and the interplay of culture, politics, economics and society in the dynamic U.S.-Mexican border region. The Department of Chicana and Chicano Studies also endeavors to contribute to the development of knowledge about the Chicano/Latino populations and the border region through original scholarship on the part of its faculty and students. The department recognizes women and gender based issues as integral to a Chicano studies program. In 1993, the department inaugurated the Magdalena Mora Award to be awarded to the winner of the outstanding history essay in Mexicana/Chicana women at the undergraduate level.

Mexican American studies majors may choose one of two areas: *Humanities*, which includes courses designed to increase the student's awareness of the Chicano culture, as well as intellectual, aesthetic, literary, historical, ethical, and human values; and *Social Science*, including courses which analyze social institutions and how they affect the individual and also emphasize contemporary Mexican American issues as they relate to the larger society. Areas of study include political science, anthropology, economics, sociology, and history.

Bilingual/bicultural graduates are sought after more than ever before. A student with a major or minor in Mexican American studies has a good possibility of securing a position and advancing. Although employment opportunities in regular classroom teaching and other careers have remained fairly constant, the number of positions for bilingual/bicultural graduates has continued to increase.

Mexican American studies is also an excellent major as preparation for postgraduate study in various professional schools. For example, students can continue their studies for advanced degrees in law, with positions specializing in minority or barrio problems; social work, as a medical or psychiatric social worker in a minority community; public administration; librarianship; and business administration, with careers in accounting, marketing, bank management, and insurance.

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.

Mexican American Studies Major

**With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 22131)**

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 double major is strongly recommended for students majoring in Mexican American studies.

A minor is not required with this major.

Preparation for the Major. Chicana and Chicano Studies 100 and 110. (6 units)

Foreign 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. Students are encouraged to satisfy this language requirement in Spanish. Refer to section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 24 upper division units to include Chicana and Chicano Studies 301 and 21 units selected from one area of specialization: (social sciences) Chicana and Chicano Studies 303, 306, 320, 340, 350A-350B, 355, 480, 498; or (humanities) Chicana and Chicano Studies 310, 314A, 314B, 335, 375, 376, 380, 396W, 464; or (border studies) Chicana and Chicano Studies 306, 355, 375, 380, 498, Economics 565, History 551B, Political Science 568. Up to six units, with appropriate content, can be applied to each area of specialization from Chicana and Chicano Studies 496, 499, and 596.

Mexican American Studies Minor

The minor in Mexican American studies consists of a minimum of 18 units in Chicana and Chicano studies to include Chicana and Chicano Studies 100, 110, and 12 units of upper division courses selected from one area of specialization (social sciences) Chicana and Chicano Studies 301, 303, 306, 320, 340, 350A-350B, 355, 480, 498; or (humanities) Chicana and Chicano Studies 310, 314A, 314B, 335, 375, 376, 380, 396W, 464; or (border studies) Chicana and Chicano Studies 306, 355, 375, 380, 498, Economics 565, History 551B, Political Science 568. Up to six units, with appropriate content, can be applied to each area of specialization from Chicana and Chicano Studies 496, 499, and 596.

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

The minor in United States-Mexican Border Studies consists of a minimum of 22 units, 12 units of which must be in upper division courses to include Chicana and Chicano Studies 355, Spanish 103, and six units selected from Chicana and Chicano Studies 306, 310, 375, 376, 380.

The following additional nine units must be taken to complete the minor:

International Economic/Business: Three units selected from Economics 360, 365, 458, 565; Finance 329; Marketing 376.

Regional Geography/History and Politics/Society: Six units selected from Communication 591; Geography 323; History 549, 551A, 551B, 555; Political Science 481, 555, 568; Social Work 350; Sociology 335, 350, 355, 555.

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

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 of Spanish proficiency, 3 on a scale of 5, as indicated on the Foreign Service Language Examination. Students must apply for admission to the program before the completion of 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 an internship 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 551B.

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.

Courses

LOWER DIVISION COURSES

(Unless otherwise noted, all Mexican American Studies courses are now listed as Chicana and Chicano Studies courses.)

100. The Mexican American Heritage (3)

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.

110. Introduction to Mexican American Studies (3)

Introduction to the culture and the civilization of the Mexican American. History; Mexican and US roots; the new identity. (Formerly numbered Mexican American Studies 110A.)

111A. Oral Communication (3)

Training in the process of oral (speech) expression: addressing the barrio; formal delivery.

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.

111B. Written Communication (3)

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 Cr in Rhetoric and Writing Studies 92A or 92B or 97A or 97B.

Training for students from Mexican American backgrounds in the process of 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 Rhetoric and Writing Studies 100 or higher- numbered composition course or Africana Studies 120 or Linguistics 100.

120A-120B. The Mexican American Role in the American Political System (3-3)

Semester I: Relationship between the Mexican American community and the American political system. Semester II: The Mexican American in relation to his city, county, and state institutions in California. This year course satisfies the graduation requirement in American Institutions.

141A-141B. History of the United States (3-3)

Spanish, Mexican, and Chicano influences on US history. Semester I: Comparative development of US and Mexico to 1865. Semester II: Mexican Americans in US history; US and Mexican national histories compared from 1865 to the present. This year course satisfies the graduation requirement in American Institutions.

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)

301. Political Economy of the Chicano People (3)

Prerequisite: Completion of the General Education requirement in Foundations 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.

303. Mexican American Community Studies (3)

Prerequisite: Completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors. Recommended: Chicana and Chicano Studies 110.

Mexican American communities from a comparative perspective. Systematic inquiry into methods and issues in community studies. Contemporary social, institutional, and political affairs.

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.

310. Mexican and Chicano Music (3) I, II

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

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.

314A. Rondalla I (3)

Six hours of activity.

Prerequisites: Upper division standing; Chicana and Chicano Studies 301 and consent of instructor.

Music of pre-Columbian and various Mexican romantic historical genres, i.e. corridos (ballads), musica Jarocho (music of Veracruz), boleros (romantic music), musica Nortena (music of Northern Mexico). Emphasis on cultural context, style, and techniques.

314B. Rondalla II (3)

Six hours per week.

Prerequisite: Chicana and Chicano Studies 314A.

Development of intermediate skills in Rondalla music, instruments, and their use. Three-voice harmony, guitar, requinto, and guitarron.

320. Mexican American Life Styles (3)

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

Social relations and cultural evolution in the Mexican American community, female-male relationships, and family. Influence of Spanish-Mexican feudal cultural heritage and US industrial-capitalist society. Comparative cross-cultural social science methodology. Includes interview techniques.

324. Gramatica Cantada (Pedagogia, Musica y Cultura) (3)

Methods and materials of Spanish instruction through music of Mexico and the Southwest.

335. Mexican American Literature (3)

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

Ideas, forms, history of significant Mexican American prose, poetry and other literary genres.

340. Mexican Women in Historical Perspective: PreColumbian to 1848 (3)

Prerequisites recommended: Chicana and Chicano Studies 111B and upper division standing.

US-Mexican history or Mexican women from PreColumbian Mexican era to annexation of Mexico's northern territories by US. Theoretical and methodological issues appraised as are gender-based norms, class and racial distinctions, and significance of female historical figures to Mexican identity.

350A-350B. Chicano History (3-3) I, II

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

Semester I: Review of indigenous origins; Hispanic institutions and northward expansion; the Mexican Republic. Semester II: Early US encroachment and the Mexican American War; Chicano influences and contributions; the multilingual and multicultural Southwest.

355. The United States-Mexico International Border (3) I

Prerequisites: Upper division standing; and completion of the General Education requirement in Foundations 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.

375. US/Mexico Border History (3)

Prerequisite: Completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors. Recommended: Chicana and Chicano Studies 110.

Historical problems and movements in the US/Mexico border region, in particular those impacting Spanish-speaking populations on both sides of the border. Contemporary border issues from a historical perspective.

376. Mexican American Culture and Thought (3)

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

Intellectual history of the Mexican American as a synthesis of different cultural traditions and perspectives. Philosophical concepts from pre-Cortesian times to the present.

380. US/Mexico Borderlands Folklore (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors. Recommended: Chicana and Chicano Studies 110.

Border folklore; myths, rituals, legends, sayings, and songs of Chicanos and Mexicanos in the US.

396W. Chicano Prose: Creative Writing (3)

Prerequisite: Satisfies University Upper Division Writing requirement for students who have completed 60 units, fulfilled the Writing Competency requirement, and completed the General Education requirement in Communication and Critical Thinking. **Proof of completion of prerequisites 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.

400. Mexican Images in Film (3)

Prerequisites: Upper division standing and completion of the General Education requirement in Foundations 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.

464. Literature for the Chicano Bilingual Student (3)

Chicano literature for the preschool, elementary, and junior high bilingual Chicano student.

480. The Mexican American and the Schools (3)

Prerequisite recommended: Chicana and Chicano Studies 110.

The Mexican American child's experience in the school system from preschool through high school with emphasis on social, intellectual and emotional growth and development.

496. Selected Topics in Mexican American Studies (1-3)

Intensive exploration of selected topics in the area of Mexican American 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 six units.

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-Mexico binational relations or border-related issues. Meets requirements for United States-Mexico Border Studies certificate program.

499. Special Study (1-3)

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

504. Immigration: A Literary Analysis (3)

Prerequisite: Upper division standing.

Literary analysis of themes of immigration, the borderlands, and ethnicity.

596. Topics in Mexican American Studies (1-3)

Prerequisite: Consent of instructor.

Advanced topics in Mexican American studies. See Class Schedule for specific content. May be repeated with new content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

Child and Family Development

OFFICE: Professional Studies and Fine Arts 413

In the College of Professional Studies and Fine Arts

TELEPHONE: (619) 594-5380

FAX: (619) 594-5921

EMAIL: balkwell@mail.sdsu.edu

Faculty

Emeritus: Cannon, Deutsch, Hewes, Milne, Price, Somerville

Interim Chair: Balkwell

Professor: Balkwell

Assistant Professor: Ritblatt

Lecturers: Mello, Semlak

Offered by the Department

Master of Science degree in child development.

Major in child development with the B.S. degree in applied arts and sciences.

Minor in child development.

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, day 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, and the Associated Students' Campus Children's Center. The department's Child Study Center focuses on undergraduate and graduate training and research by operating a Campus Children's Center in collaboration with SDSU's Associated Students and San Diego City Schools. Special programs, such as *Art and Music Experiences for Children*, often extend service through the summer and allow for creative collaboration across disciplines. All children's programs are mainstreamed and a wide range of special needs and at-risk populations are served by a full inclusion program.

The child development degree also provides a flexible curriculum base for continuation into graduate programs in child development or family relations; in child, family, and marriage counseling; in social work; in psychology, law, or sociology. Also available are programs leading to the multiple subject and single subject teaching credentials, the community college teaching credential, and a specialist 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, psychology, recreation, social work, and sociology.

Child Development Major

With the B.S. Degree in Applied Arts and Sciences
(Major Code: 08231)

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 (1 unit), 272, 275; Biology 100; Psychology 101; Sociology 101; Psychology 270 and 271, or Sociology 201. (25-26 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 38 upper division units to include Child and Family Development 335, 370, 371, 375, 537, 575, 590. Completion of an additional 16 units in one of the three specializations listed below.

Child Development Specialist: Child and Family Development 376A (1 unit), 377, 477, 570, 577, and three upper division units selected with approval of the program adviser.*

Family Development Specialist: Child and Family Development 376C (1 unit), 536, 578, and nine units selected with the approval of the program adviser.

General Child and Family Development: Child and Family Development 376A, 376B, or 376C (1 unit), and 15 upper division units selected with the approval of the program adviser.

* With appropriate work experience fulfills requirements for the Child Development Master Teacher Permit or Site Supervisor Permit in California; with completion of the B.S. degree and one program year of site supervisor experience fulfills requirements for the Child Development Program Director Permit. For complete information on Title 5 Regulations pertaining to California Child Development Permits write: California Commission on Teacher Credentialing, Certification, Assignment and Waivers Division, P. O. Box 944270, Sacramento, CA 94244-2700, (916) 445-7254 or the San Diego County Office of Education, Credentials Technician, 6401 Linda Vista Road, San Diego, CA 92111, (619) 292-3500.

Child Development Minor

The minor in child development consists of a minimum of 16 units to include Child and Family Development 270+, 270L (1 unit), and 12 units selected from Child and Family Development 370, 371, 375+; one unit selected from 376A+, 376B+, or 376C+; 377, 477, 537, 570+, 575, 577, 590, 597, 597L; Psychology 432+. No more than six of the 16 units may be in experiential 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.

+ Indicates course with prerequisites not included in list of courses acceptable for minor

Family Life Education Certificate

The purpose of this certificate program is to prepare students for careers in family life education. The program is designed for individuals working on degrees in child development and health science. 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.

Awarding of the certificate requires completion of an approved pattern of five courses (15 units) with a grade of "C" or better in each of the courses to include Child and Family Development 135, 270+ or 371+ or Psychology 230+; Biology 307, Community Health Education 475; and Psychology 355+. The course offerings under this program meet the criteria for training and standards of the American Association of Sex Educators and Counselors.

Child and Family Development 135, 270 or 371 (six units) are applicable to the child development major. Community Health Education 475 and Psychology 355 (six units) are applicable to the health science

major. Courses in the certificate may not be counted toward the minor.

For further information regarding the Family Life Education Certificate program, consult the Department of Child and Family Development.

+ Indicates course with prerequisites not included in requirements listed above.

Courses

LOWER DIVISION COURSES

135. Principles of Family Development (3) I, II (CAN H EC 12)

Intimacy, compatibility, conflict, and communication in relationship formation and adjustment.

270. Principles of Child Development (3) I, II

Prerequisites: Psychology 101; concurrent registration in Child and Family Development 270L for one unit. **Proof of completion of prerequisite required:** Copy of transcript.

Child from conception through adolescence; emphasis on biological, cognitive, and psychosocial development.

270L. Principles of Child Development Laboratory (1-3) I, II

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. (Formerly numbered Child and Family Development 271 [laboratory portion]).

272. Child, Family, Community (3)

Prerequisites: Child and Family Development 135, 270, 270L (one unit); Sociology 101.

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. (Formerly numbered Child and Family Development 436.)

275. Developmentally Appropriate Practices (3)

Two lectures and two hours of activity.

Prerequisites: Child and Family Development 270, 270L (one unit).

Design, implementation, and evaluation of developmentally appropriate practices for children and families.

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)

335. Interaction in Families (3) I, II

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.

370. Research, Assessment, and Evaluation of Children and Families (3) I, II

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.

371. Human Development: Middle Childhood and Adolescence (3) I, II

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.

Physical, social, emotional, and intellectual development of children during middle childhood and adolescence. Emphasis on parent, sibling, and peer relationships. Prevention and correction of developmental difficulties.

375. Child and Family Development Programs (3) I, II

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. Concurrent registration in one unit of 376A, 376B, or 376C.

Program models for children and families. Communication techniques, basic skills, and strategies in working with children and families. Development, implementation, and evaluation of appropriate curricula and environments.

376. Laboratory Experiences with Children and Families (1-3) Cr/NC

Three hours of laboratory for each unit of credit.

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. Credit or concurrent registration in Child and Family Development 375.

Directed experiences in a mainstreamed setting. Designing and implementing, developmentally appropriate activities. May be repeated with consent of instructor. Maximum credit three units in Child and Family Development 376A, 376B, 376C.

- A. Programs for Infants, Toddlers, Preschool Children (Formerly numbered Child and Family Development 376L.)
- B. Programs for School-Age Children and Adolescents
- C. Programs for Families

377. Adult Supervision in Child and Family Development Programs (3)

Prerequisites: Child and Family Development 375 and 376A, 376B, or 376C.

Development of leadership, communication, conflict resolution, and supervision of professionals in child and family development programs.

477. Administration of Child Development Programs (3) I

Prerequisite: Child and Family Development 375. **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.

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.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

UPPER DIVISION COURSES (Also Acceptable for Advanced Degrees)

536. Divorce and Remarriage (3) II

Prerequisites: Child and Family Development 335 and Sociology 101.

Integration of family theories and research findings. Emphasis on adjustment to divorce and remarriage throughout life cycles, across cultures, social classes, and ethnicities.

537. Child Abuse and Family Violence (3) I, II

Prerequisites: Child and Family Development 270 and 371; consent of instructor for graduate students.

Multidisciplinary approach to child abuse and family violence including maltreatment, mistreatment, neglect, sexual abuse.

570. Infant/Toddler Development (3) I

Prerequisite: Child and Family Development 275 or Psychology 230 with grade of C (2.0) or better. **Proof of completion of prerequisite required:** Copy of transcript.

Physiological, psychological, social and cultural development of the human organism from birth through three years of age.

575. Public Policy and Professional Ethics in Child and Family Development (3)

Prerequisites: Child and Family Development 375; 376A, 376B, or 376C; and 536 or 537 or 590.

Public policy and professional ethics as applied to child and family development programs and research.

577. Advanced Administration of Child Development Programs (3) II

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.

578. Parent-Child Relationships Across the Life Span (3) I

Prerequisites: Child and Family Development 335 and 370.

Multidisciplinary approach to the parent-child relationship as it continues and changes throughout the life of the dyad, including study of normative and nonnormative life events.

590. Developmental Dysfunctions (4) I, II

Three lectures and three hours of laboratory.

Prerequisite: Child and Family Development 270 or Psychology 230, 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 emotional, psychological, and physical disorders. Etiology, development, and adjustment. Directed experience with special needs individuals and their families.

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. 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 either the bachelor's or master's degree. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

597. Child and Family Development Field Experiences (1) I, II

Prerequisites: Fifteen upper division units in child and family development with a grade of B (3.0) or better in courses selected from Child and Family Development 335, 370, 371, 375; 376A, 376B, or 376C; 377, 537, 575, or 590. Concurrent registration in Child and Family Development 597L. **Proof of completion of prerequisites required:** Copy of transcript.

Developmental theories and techniques in child development.

597L. Child and Family Development Field Experiences Laboratory (2) Cr/NC I, II

Prerequisites: Fifteen upper division units in child and family development with a grade of B (3.0) or better in courses selected from Child and Family Development 335, 370, 371, 375; 377, 537, 575, or 590. Concurrent registration in Child and Family Development 597. **Proof of completion of prerequisites required:** Copy of transcript.

Directed experiences in practical application of developmental theories and techniques in various community agencies.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

For courses in nutrition, refer to "Nutrition" in this section of the catalog.

Chinese

In the College of Arts and Letters

OFFICE: Business Administration 327
TELEPHONE: (619) 594-5268
FAX: (619) 594-4877

Faculty

Emerita: Woo
Chair: Choi
Associate Professor: Zhang

Offered by the Department of Linguistics and Oriental Languages

Major in international business, with emphasis in Chinese. *See* International Business.
Minor in Chinese.

Foreign Language Requirement for the B.A. Degree in Liberal Arts and Sciences

Students electing the study of Chinese to fulfill the foreign 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 foreign 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, although students with fewer than three years of high school level language may complete the first semester college course for graduation credit.
2. The first *three years* of high school level language count as the equivalent of the first two college semesters, although students with fewer than four years of high school level language may complete the second semester college course for graduation credit. Students who have completed three years of foreign language in high school will not receive credit for the first semester college course unless at least five years separate the last high school course and the first college course.
3. *Four years* of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the foreign language requirement.

Chinese Minor

The minor in Chinese consists of a minimum of 19 units in Chinese; at least 16 units must be in the Chinese language 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, 308, Asian Studies 458, 459, Comparative Literature 455, 460 (when appropriate), History 566, 567, either Linguistics 420 or 520, Philosophy 351, Religious Studies 403.

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

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, 301, and 302 taken out of sequence or concurrently.

101. Elementary Chinese I (5) I

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. Not open to students who have completed three years of high school Chinese unless the third course was completed five or more years ago. See Class Schedule for appropriate section based on your background in Chinese.

102. Elementary Chinese II (5) II

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. Not open to students who have completed four years of high school Chinese unless the fourth course was completed five or more years ago. See Class Schedule for appropriate section based on your background in Chinese.

201. Intermediate Chinese I (5) I

Five lectures and one hour of laboratory.

Prerequisites: Chinese 102 and completion of the General Education requirement in Foundations II.C., Humanities.

Development of facility to comprehend and produce spoken Chinese. Acquisition of advanced language structures and an additional 400 characters. Emphasis on connected discourse.

202. Intermediate Chinese II (5) II

Five lectures and one hour of laboratory.

Prerequisites: Chinese 201 and completion of the General Education requirement in Foundations II.C., Humanities.

Continuation of Chinese 201. Reading of contemporary work and writing of short passages in Chinese. Acquisition of an additional 400 characters.

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.

301. Advanced Chinese I (3)

Prerequisites: Chinese 202 and completion of the General Education requirement in Foundations 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.

302. Advanced Chinese II (3)

Prerequisites: Chinese 301 and completion of the General Education requirement in Foundations II.C., Humanities.

Continuation of Chinese 301. Writing paragraphs and longer expository texts. Reading modern and classical literature.

351. Introduction to Classical Chinese (3)

Prerequisite: Chinese 302.

Basic vocabulary and grammatical features of classical Chinese, its contrast with modern Chinese, its special stylistic and rhetorical conventions. Texts from Confucian canon and Tang Dynasty poetry.

352. Aspects of Chinese Language (3)

Prerequisite: Any one course in Chinese, Linguistics, Anthropology, or Asian Studies.

Relationship with other languages; dialects, their development and relationship to Mandarin; writing system and its evolution; Romanization schemes; structural and socio-cultural aspects, especially as they differ from English; unique problems of learning the language. Taught in English.

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.

433. Newspaper Chinese (3)

Prerequisite: Credit or concurrent registration in Chinese 302.

Developing reading skills; cultural, historical, and linguistic information for understanding of Newspaper Chinese. Conventions, special

structures, and vocabulary; reading strategies such as skimming and scanning; background information on idioms and literary allusions used in newspapers.

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.

450. Readings in Chinese Civilization (3)

Prerequisite: Chinese 302.

Readings in Chinese from areas such as philosophy, religion, history, geography, folk tales, and legends. Film and video presentations to enhance a greater understanding and appreciation of Chinese civilization.

451. Readings in Modern Chinese Literature (3)

Prerequisite: Chinese 302.

Fiction, prose, poems, and plays written after May Fourth Movement in 1911, which marked beginning of vernacular literature.

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.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

Civil and Environmental Engineering

In the College of Engineering

OFFICE: Engineering 424
TELEPHONE: (619) 594-6071

The undergraduate degree in Civil Engineering is accredited by the Accreditation Board for Engineering and Technology, Inc.

Faculty

Emeritus: Capp, Johnson, McGhie, Noorany, Quiett, Stone, Stratton

Chair: Supernak

The Blasker Chair in Environmental Engineering: Gurol

Professors: Banks, Chang, Chou, Gurol, Krishnamoorthy, Ponce, Supernak, Westermo

Associate Professors: Bayasi, Sharabi

Assistant Professor: Hunt

Offered by the Department

Doctor of Philosophy degree in applied mechanics.

Master of Science degree in civil engineering.

Major in civil engineering with the B.S. degree.

Mission of the Department of Civil and Environmental Engineering

The mission of the Department of Civil and Environmental Engineering is to provide a high quality undergraduate and graduate education in the civil 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 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 and environmental engineering. Engineering design is emphasized, particularly in conjunction with computer utilization and practical civil and environmental 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 undergraduate degree prepares the student for an entry-level professional position in addition to informal or formal graduate studies.

Many students who complete the civil or the environmental undergraduate program choose to continue their formal studies on a full or part-time basis at San Diego State University or at another institution. (See the *Bulletin of the Graduate Division* for additional information.) The objective of the graduate program is to broaden the student's technical competence and design abilities and allow for additional specialization.

The civil and environmental engineering program is 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.

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. A portion of the Blasker-Rose-Miah Endowment will also be used to fund the \$250,000 Blasker Award for Environmental Science and Engineering. Beginning in 1999, the award will be given annually to the individual or group that presents the most unique solution to an environmental problem as defined by the Blasker Committee of Experts. The Blasker Chair participates in the selection of the recipient of this award.

The first appointee to the Chair, Dr. Mirat D. Gurol, is an accomplished scholar and researcher in the areas of innovative treatment technologies of contaminated water, air, soil, and hazardous waste.

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 Accreditation Board for Engineering and Technology, Inc., 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 twelve units may be used for General Education credit from any one department or academic unit.

I. Communication and Critical Thinking: 9 units

1. Oral Communication (3 units)
2. Composition (3 units)
3. Intermediate Composition and Critical Thinking (3 units)

II. Foundations: 29 units

A. Natural Sciences and Quantitative Reasoning (17 units):

1. Physical Sciences (11 units)
Engineering students will take Chemistry 200 which includes a laboratory (5 units).
Physics 195 (3 units)
Physics 196 (3 units)
2. Life Sciences (3 units)
3. Laboratory (satisfied under A.1. above)
4. Mathematics/Quantitative Reasoning
Engineering students will take Mathematics 150, 3 units applicable to General Education

B. Social and Behavioral Sciences (3 units)

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Units</i>	<i>Spring Semester</i>	<i>Units</i>
Chem. 200, General Chemistry.....	5	Phys. 195, Principles of Physics	3
Math. 150, Calculus I	5	Math. 151, Calculus II.....	4
ME 190, Engineering Drawing	2	Engr. 120, Engr. Problem Analysis	2
General Education	6	CEE 160, Stat Methods for CEE.....	2
	18	General Education	6
			17

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Units</i>	<i>Spring Semester</i>	<i>Units</i>
Phys. 196, Principles of Physics	3	Phys. 197, Principles of Physics	3
Math. 252, Calculus III	4	EM 220, Dynamics	3
EM 200, Statics.....	3	EE 204, Principles of Electrical Engr....	3
ME 260, Engineering Materials.....	3	CEE 218, Surveying for Civil Engineers	3
General Education	3	General Education	6
	16		18

JUNIOR YEAR

<i>Fall Semester</i>	<i>Units</i>	<i>Spring Semester</i>	<i>Units</i>
CEE 301, Intro. to Solid Mechanics.....	3	EM 340, Fluid Mechanics	3
CEE 302, Solid Mechanics Lab	1	EM 341, Fluid Mechanics Lab	1
Engr. 280, Methods of Analysis.....	3	CEE 253, Geology for Engineers	2
ME 352, Thermo. & Heat Transfer	3	CEE 321, Structural Analysis I	4
General Education	6	CEE 355, Environmental Studies	3
	16	General Education	6
			19

SENIOR YEAR

<i>Fall Semester</i>	<i>Units</i>	<i>Spring Semester</i>	<i>Units</i>
CEE 444, Applied Hydraulics	3	CEE 421, Reinforc. Concrete Design ...	3
CEE 462, Geotechnical Engineering	3	CEE 495, Civil Engineering Design.....	3
CEE 463, Geotechnical Engineering Lab	1	# Professional Electives	9
CEE 481, Transportation Engineering.....	3	American Institutions.....	3
# Professional Electives	5		
American Institutions	3		
	18		18

Approved as part of the student's master plan.

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 in General Education, excluding courses numbered 500 and above.

IV. Explorations: 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.
- B. Upper division Humanities (3 units from a department not selected in A above.)
- C. Upper division Social and Behavioral Sciences (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.

Civil Engineering Major

With the B.S. Degree (Major Code: 09081)

NOTE: See above chart for the recommended sequence of courses for the major in civil engineering.

All students in civil and environmental engineering pursue a common program of study in basic engineering and civil engineering fundamentals. In addition, 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 below as "professional electives"

and may be selected from available courses in foundation, structural, environmental, transportation, or water resources engineering; computer programming; advanced surveying; engineering economics; and other areas. *The students' choice of elective courses must be made in consultation with their adviser and documented by the filing of an approved master plan during the first semester of their junior year.*

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Courses

(All Civil Engineering courses are now listed as Civil and Environmental Engineering courses.)

LOWER DIVISION COURSES

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. Maximum credit two units.

160. Statistical Methods for Civil and Environmental Engineers (2)

Prerequisite: Mathematics 140.

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 and Environmental Engineering 160; Biology 215; Economics 201; Political Science 201; Psychology 270; Sociology 201; Statistics 119, 250. (Formerly numbered Engineering 140.)

218. Surveying for Civil Engineers (3) I, II

Two lectures and three hours of laboratory.

Prerequisites: Civil and Environmental 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.

253. Geology for Engineers (2) I, II

One lecture and three hours of laboratory.

Prerequisite: Civil and Environmental Engineering 218.

Earth materials, geologic processes, and methods of geologic interpretation of concern to engineers. Open only to students majoring in engineering.

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)

301. Introduction to Solid Mechanics (3) I, II

Prerequisites: Engineering Mechanics 200 with a grade of C or better, and credit or concurrent registration in Engineering 280 and Engineering Mechanics 220.

Mechanics of solid deformable bodies involving analytical methods for determining strength, stiffness, and stability of load-carrying members. (Formerly numbered Engineering Mechanics 301.)

302. Solid Mechanics Laboratory (1) I, II

Three hours of laboratory.

Prerequisite: Credit or concurrent registration in Civil and Environmental Engineering 301.

Laboratory studies in solid mechanics. Experimental stress analysis. Experimental confirmation of theory. (Formerly numbered Engineering Mechanics 302.)

321. Structural Analysis I (4) I, II

Prerequisite: Civil and Environmental Engineering 301 with minimum grade of C.

Principles of mechanics applied to analysis of beams, frames, trusses, and three-dimensional frameworks. Graphical methods, influence lines; deflections; introduction to statically indeterminate structures and moment distribution.

355. Environmental Engineering (3) I, II

Prerequisite: Chemistry 200.

Causes and effects of environmental problems and engineering methods to control them.

421. Reinforced Concrete Design (3) I, II

Prerequisite: Civil and Environmental Engineering 321 with minimum grade of C.

Properties and characteristics of reinforced concrete; design of structural components. Introduction to plastic theory and limit design.

423. Timber Design (2) I, II

Prerequisites: Civil and Environmental Engineering 321 with minimum grade of C.

Physical and mechanical properties of wood. Sawn lumber, glulam, plywood. Design of various types of wood structures. Connection design.

444. Applied Hydraulics (3) I, II

Prerequisite: Engineering Mechanics 340. **Proof of completion of prerequisite required:** Copy of transcript.

Open channel and pressure conduit flow, pumps and turbines, hydroelectric power, and water law.

445. Applied Hydrology (3) II

Prerequisite: Civil and Environmental Engineering 444 with minimum grade of C.

Basic hydrologic principles, hydrologic measurements, small and midsize catchment hydrology, frequency analysis, regional analysis, reservoir, stream channel and catchment routing, hydrologic design.

462. Geotechnical Engineering (3) I, II

Prerequisites: Civil and Environmental Engineering 253; Civil and Environmental Engineering 301 with minimum grade of C, credit or concurrent registration in Engineering Mechanics 340, and concurrent registration in Civil and Environmental Engineering 463. **Proof of completion of prerequisite required:** Copy of transcript or enrollment confirmation.

Mechanics of soils as they apply to engineering problems, soil classification, compaction, swelling, consolidation, strength and permeability. Applications to geotechnical and environmental engineering problems.

463. Geotechnical Engineering Laboratory (1) I, II

Three hours of laboratory.

Prerequisite: Concurrent registration in Civil and Environmental Engineering 462. **Proof of completion of prerequisite required:** Copy of transcript or enrollment confirmation.

Laboratory procedures of soil testing for geotechnical and environmental engineering problems.

465. Foundation Engineering and Earth Retaining Structures (3) II

Prerequisites: Civil and Environmental Engineering 462 and 463 with minimum grades of C.

Soil mechanics theories applied to design of shallow and deep foundations; lateral pressure of soils, design of retaining walls.

479. Construction Materials (3) II

Two lectures and three hours of laboratory.

Prerequisites: Civil and Environmental Engineering 462 and 481.

Selection, design and control of mixes of portland cement and asphalt concrete. Properties of these and other materials used in construction.

481. Transportation Engineering (3) I, II

Prerequisite: Civil and Environmental Engineering 218 with minimum grade of C.

Function and design of different modes of transportation for moving people and goods; and corresponding terminal facilities.

482. Highway Engineering (3) I, II

Two lectures and three hours of laboratory.

Prerequisite: Civil and Environmental Engineering 481 with minimum grade of C.

Highway design, facility sizing, geometric design, drainage, earthwork, pavement design, traffic control devices, safety and environmental considerations.

491. Construction Methods (3) I

Prerequisite: Civil and Environmental Engineering 321.

Components and methods of construction including earthwork; foundations; wood, steel, and concrete construction; roofing and cladding; interior construction.

492. Construction Engineering (3) II

Prerequisites: Civil and Environmental Engineering 491 and Engineering 430.

Project oriented. Cost estimating; alternative cost-saving changes; critical path scheduling.

495. Civil Engineering Design (3) I, II

One lecture and six hours of laboratory.

Prerequisites: Credit or concurrent registration in Civil and Environmental Engineering 321, 355, 421, 444, 462, and 481. At least three of these courses must be completed prior to enrolling in this course.

Application of engineering principles and design techniques to the design of civil engineering projects.

496. Advanced Civil Engineering Topics (1-3) I, II

Prerequisites: Minimum grade point average of 3.0 and consent of instructor.

Modern developments in civil engineering. See Class Schedule for specific content. Maximum credit six units for any combination of Civil and Environmental Engineering 496, 499 and 596.

499. Special Study (1-3) Cr/NC I, II

Prerequisites: Minimum grade point average of 3.0 and consent of instructor.

Individual study. Maximum credit six units for any combination of Civil and Environmental Engineering 496, 499 and 596.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

521. Structural Analysis II (3) I

Prerequisite: Civil and Environmental Engineering 321 with minimum grade of C.

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.

525. Design of Steel Structures (3) I, II

Prerequisite: Civil and Environmental Engineering 321 with minimum grade of C.

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.

530. Open Channel Hydraulics (3) I, II

Prerequisite: Civil and Environmental Engineering 444 with minimum grade of C. **Proof of completion of prerequisite required:** Copy of transcript.

Principles of open channel flow; analysis and problems of critical, uniform, gradually-varied, and rapidly-varied flows, design and environmental problems; computer simulations and applications; and culvert hydraulics.

553. Environmental Engineering Laboratory (3)

Two lectures and three hours of laboratory.

Prerequisites: Chemistry 200; Civil and Environmental Engineering 355 with minimum grade of C. **Proof of completion of prerequisite required for Civil and Environmental Engineering 355:** Copy of transcript.

Analysis of natural waters and wastewaters. Sampling and analysis of hazardous environmental pollutants. Techniques to analyze solid waste.

554. Process Fundamentals of Environmental Systems (3)

Prerequisite: Civil and Environmental Engineering 355 with minimum grade of C. **Proof of completion of prerequisite required:** Copy of transcript.

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.

555. Water and Wastewater Engineering (3) I

Prerequisite: Civil and Environmental Engineering 355 with minimum grade of C. **Proof of completion of prerequisite required:** Copy of transcript.

Water and wastewater. Physical, chemical and biological methods of treatment. Advanced waste treatment processes. Water reclamation.

556. Air Quality Management (3)

Prerequisite: Civil and Environmental Engineering 355 with minimum grade of C. **Proof of completion of prerequisite required:** Copy of transcript.

Sources of air pollutants. Transportation, diffusion, and transformation of pollutants in the atmosphere. Measurement and control of air pollution.

558. Solid Waste Management (3) II

Prerequisite: Civil and Environmental Engineering 355 with a grade of C or better. **Proof of completion of prerequisite required:** Copy of transcript.

Management of municipal solid waste from a civil 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.

560. Environmental Engineering Design (3)

Prerequisites: Civil and Environmental Engineering 555, 558 and Engineering 430.

Application of engineering principles and design techniques to design of environmental engineering projects.

596. Advanced Civil Engineering Topics (1-3) I, II

Prerequisites: Minimum grade point average of 3.0 and consent of instructor.

Modern developments in civil engineering. See Class Schedule for specific content. Maximum credit of six units for any combination of Civil and Environmental Engineering 496, 499 and 596 applicable to a bachelor's degree. Maximum combined credit of six units of Civil and Environmental Engineering 596 and 696 applicable to a 30-unit master's degree.

**GRADUATE COURSES
Refer to Bulletin of the Graduate Division.**

Classics

In the College of Arts and Letters

OFFICE: Adams Humanities 4231
TELEPHONE: (619) 594-5186
FAX: (619) 594-1004

Faculty

Emeritus: Burnett, Warren
Chair: Genovese
Professors: Eisner, Genovese, Hamilton
Lecturer: Smith

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.

Teaching major in classics (concentration in Latin) for the single subject teaching credential in foreign languages.
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 the profound truths and disciplined forms cultivated by classical authors and artists have assured their works 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. There is also a Latin-centered curriculum that prepares them for a teaching career. Classics majors have at their disposal the library, art, and relaxation of the Burnett Classics Seminar Room, and they have access to the audiovisual library of the Schaber Humanities Center. 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, especially at the executive level. 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.

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 foreign 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, although students with fewer than three years of high school level language may complete the first semester college course for graduation credit.

2. The first *three years* of high school level language count as the equivalent of the first two college semesters, although students with fewer than four years of high school level language may complete the second semester college course for graduation credit. Students who have completed three years of foreign language in high school will not receive credit for the first semester college course unless at least five years separate the last high school course and the first college course.

3. *Four years* of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the foreign language requirement.

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.

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.

A minor is not required with this major.

Emphasis in Classical Humanities

Preparation for the Major. Classics 101G-202G or 250G, or Classics 101L-202L or 250L; and six units from Classics 140, 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.

Foreign Language Requirement. The foreign language requirement is automatically fulfilled through coursework for preparation for the major plus one language course in the major.

Upper Division Writing Requirement. Passing the University Writing Examination or Rhetoric and Writing Studies 503W with a grade of C (2.0) or better.

Major. A minimum of 30 upper division units to include Classics 320, 330, History 500A-500B, and Philosophy 411 (prerequisites waived for students in this major); six units selected from Art 568, Communication 450, History 501, Humanities 402, upper division courses in Classics; six units of Greek or Latin; and Humanities 490.

Emphasis in Classical Language

Preparation for the Major. Eight to 20 units from Classics 101G-202G, 101L-202L, 250G, 250L; and six units from Classics 140, Comparative Literature 270A, History 105, Humanities 140. (14-26 units)

Foreign Language Requirement. The foreign language requirement is automatically fulfilled through coursework for preparation for the major plus one language course in the major.

Upper Division Writing Requirement. Passing the University Writing Examination or Rhetoric and Writing Studies 503W with a grade of C (2.0) or better.

Major. A minimum of 30 upper division units to include Classics 320; History 500A or 500B; three to nine units from upper division courses in Classics, Art 568, History 500A, 500B, Philosophy 411 (prerequisites waived for students in this major); 12-18 units of Greek or Latin; and Humanities 490.

Classics Major

In preparation for the Single Subject Teaching Credential in Foreign Languages

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 15041)

All candidates for a teaching credential must complete all requirements as outlined in this section of the catalog under Policy Studies or Teacher Education. For students completing the single subject teaching credential program, no more than 48 units in classics can apply to the degree.

This major may be used by students in policy studies or teacher education as an undergraduate major for the B.A. degree in liberal arts and sciences.

Emphasis in Latin

Preparation for the Major. Classics 101L-202L or Classics 250L; and six units from Classics 140, Comparative Literature 270A, History 105, Humanities 140. (14-16 units)

Foreign Language Requirement. The foreign language requirement is automatically fulfilled through coursework for preparation for the major plus one language course in the major.

Upper Division Writing Requirement. Passing the University Writing Examination or Rhetoric and Writing Studies 503W with a grade of C (2.0) or better.

Major. A minimum of 30 upper division units to include Classics 303L, 304L, 320; nine units in Classics 496L or 599L to include three units in Special Study in Latin Teaching Methods; History 500B; six units from Classics 310, 330, 340, Art 568, History 500A, or Philosophy 411 (prerequisites waived for students in this major); and Humanities 490.

Classics Minor

The classics minor consists of a minimum of 18-20 units selected from one of the following:

Language – 19-20 units of which nine units must be upper division to include 16-17 units in Greek or in Latin and three units selected from Classics 310, 320, 330, or 340.

Nonlanguage – 18 units of which 12 units must be upper division to include 6-12 units from classics courses, Art 568, History 500A, 500B, or Philosophy 411*.

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.

Foreign Language Requirement for the B.A. Degree in Liberal Arts and Sciences

Students electing the study of Greek or Latin to fulfill the foreign 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.

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, 301L, 303L taken out of sequence.

LOWER DIVISION COURSES

101G. Elementary Greek I (5) I

Introduction to ancient Greek, emphasizing grammatical foundations of Attic and Koine prose. Not open to students who have completed three years of high school ancient Greek unless the third course was completed five or more years ago. Not open to students with credit in Classics 250G.

101L. Elementary Latin I (5) I

Introduction to Latin, emphasizing grammatical foundations of classical prose. Not open to students who have completed three years of high school Latin unless the third course was completed five or more years ago. Not open to students with credit in Classics 250L.

120. English from Latin and Greek (3)

General philology, emphasizing Latin and Greek bases and their English derivatives. Etymology, word analysis and construction, language history and structure. (Formerly titled "Latin and Greek Word Derivation.")

140. Our Classical Heritage (3)

Greek and Roman art, literature, and institutions as reflected in the Western tradition.

202G. Elementary Greek II (5) II

Prerequisite: Classics 101G.

Continuation of Greek grammar with selections illustrating syntax and style. Not open to students who have completed four years of high school ancient Greek unless the fourth course was completed five or more years ago. Not open to students with credit in Classics 250G.

202L. Elementary Latin II (5) II

Prerequisite: Classics 101L.

Continuation of Latin grammar with selections illustrating syntax and style. Not open to students who have completed four years of high school Latin unless the fourth course was completed five or more years ago. Not open to students with credit in Classics 250L.

250G. Accelerated Elementary Greek (8) S (Offered only in Extension)

Intensive one-semester introduction to ancient Greek, emphasizing basic grammar, vocabulary, syntax. Preparation for Classics 303G. Not open to students who have completed three years of high school ancient Greek unless the third course was completed five or more years ago. Not open to students with credit in Classics 101G and 202G.

250L. Accelerated Elementary Latin (8) S (Offered only in Extension)

Intensive one-semester introduction to Latin, emphasizing basic grammar, vocabulary, syntax. Preparation for Classics 303L. Not open to students who have completed four years of high school Latin unless the fourth course was completed five or more years ago. Not open to students with credit in Classics 101L and 202L.

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)

303G. Readings in Greek Prose (3) I

Prerequisites: Classics 202G or 250G, and completion of the General Education requirement in Foundations II.C., Humanities.

Readings selected from Greek history, philosophy, oratory, and New Testament. Authors such as Xenophon, Plato, Lysias, the Evangelists. Emphasis on rapid reading.

303L. Readings in Latin Prose (3) I

Prerequisites: Classics 202L or 250L, and completion of the General Education requirement in Foundations II.C., Humanities. General Education prerequisite not required for Classics majors.

Readings selected from classical Latin history, philosophy, oratory, letters. Authors such as Sallust, Cicero, Pliny the Younger.

304G. Readings in Greek Poetry (3) II

Prerequisites: Classics 303G, and completion of the General Education requirement in Foundations II.C., Humanities.

Readings selected from Greek epic, elegy, tragedy. Authors such as Homer, Sophocles, Euripides.

304L. Readings in Latin Poetry (3) II

Prerequisites: Classics 303L, and completion of the General Education requirement in Foundations II.C., Humanities. General Education prerequisite not required for Classics majors.

Readings selected from classical Latin epic, lyric, elegy, comedy. Authors such as Vergil, Catullus, Ovid, Plautus.

310. Classical Mythology (3)

Prerequisites: Nine units from General Education courses in Foundations II.C., Humanities. Recommended: Rhetoric and Writing Studies 200.

Mythological elements in Greek and Roman art, literature, and religion.

320. Classical Literature (3) I

Prerequisites: Nine units from General Education courses in Foundations II.C., Humanities. General Education prerequisite not required for Classics majors. Recommended: Rhetoric and Writing Studies 200.

Reading in translation of Greek and Latin masterpieces. Emphasis on epic and prose genres. Authors such as Homer, Herodotus, Plato, Vergil, Apuleius. Literary and historical criticism.

330. Classical Drama (3) II

Prerequisites: Nine units from General Education courses in Foundations II.C., Humanities. General Education prerequisite not required for Classics majors. Recommended: Rhetoric and Writing Studies 200.

Reading in translation of Greek and Roman tragedies and comedies. Playwrights such as Aeschylus, Sophocles, Euripides, Aristophanes, Plautus, Seneca. Literary, dramatic, historical criticism.

340. Classical Civilization (3)

Prerequisites: Nine units from General Education courses in Foundations II.C., Humanities. Recommended: Rhetoric and Writing Studies 200.

Greek and Roman civilization from Bronze Age to Late Empire. Integration of history, philosophy, literature, the arts, and society.

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. Advanced reading in an author, genre, or period, or work in linguistics.

L. Topics in Latin. Advanced reading in an author, genre, or period, or work in linguistics.

UPPER DIVISION COURSE

(Also Acceptable for Advanced Degrees)

599. Special Study (1-3) I, II

Prerequisites: Consent of major or graduate adviser; to be arranged by department chair and instructor. For 599C: Classics 304L or 304G. For 599G: 304G. For 599L: 304L.

Individual study. Maximum credit six units.

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: Professional Studies and Fine Arts 222
TELEPHONE: (619) 594-5450
FAX: (619) 594-6246
EMAIL: socdesk@mail.sdsu.edu

Faculty

Emeritus: Adams, Benjamin, Brown, Heighton, Holowach, Jameson, Jones, Lee, Madsen, Odendahl, Sanders, Sorensen, Whitney, Witherspoon, Wylie

Director: Real

The Lionel Van Deerlin Professor of Communication and Public Policy: Eger

Filmmaker in Residence: Ofield

Professors: Andersen, J., Andersen, P., Anderson, Beach, Blue, Broom, Buckalew, Dionisopoulos, Dozier, Durbin, Geist, Hartung, Hellweg, Johnson, Lauzen, Lustig, Mueller, Ofield, Real, Samovar, Spitzberg, Weitzel, Wulfemeyer

Associate Professors: Borden, Davis, Martin, Meador

Assistant Professors: Robbins, Spevak

Offered by the School

Master of Arts degree in communication with specializations in:

Advertising and public relations.

Critical-cultural studies.

Interaction studies.

Intercultural and international studies.

New media studies.

News and information studies.

Telecommunications and media management

Master of Arts degree in television, film, and new media production.

Major in communication with the B.A. degree in liberal arts and sciences.

Emphasis in advertising.

Emphasis in media management.

Emphasis in public relations.

Emphasis in telecommunications and film.

Major in communication with the B.A. degree in liberal arts and sciences **OR** applied arts and sciences with specializations in:

Applied communication studies.

Critical-cultural studies.

Interaction studies.

Intercultural and international studies.

New media studies.

Teaching major in communication for the single subject teaching credential in English/speech.

Major in journalism with the B.A. degree in liberal arts and sciences.

Teaching major in journalism for the single subject teaching credential in English/journalism.

Major in television, film, and new media production with the B.S. degree in applied arts and sciences.

Major in theatre, with emphasis in design for television and film. **See** Theatre.

Minor in advertising.

Minor in communication.

Minor in journalism.

Minor in media management.

Minor in public relations.

Minor in television, film, and new 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, the area in 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 Communication, as an academic unit within the College of Professional Studies and Fine Arts, emphasizes scholarly, creative, and professional aspects of communication studies. The school is a unique center for the teaching, research, and development of integrated, interactive, international, and intercultural communication for the twenty-first century. The mission of the School of Communication is to be a leader in advancing the theory and understanding of human communication and improving the practice of human communication; to study and teach the art, science, and practice of communication; and to provide an educational environment encouraging excellence, leadership, and creativity in communication scholarship and professional excellence.

The school administers and operates as teaching facilities a large color television studio, a film production center for documentary and drama, a radio complex, three computer laboratories, and various news editing bays. The School of Communication has more than 1,000 majors, comprising four percent of the entire University's student population.

The School of Communication houses the Production Center for Documentary and Drama, which is integral to the technical and artistic training of senior students in film, video and the interface between these technologies, and in documentary production. In the Center, students participate in full-scale location and studio production and are mentored by the Filmmaker in Residence in the creation of their required course film and video projects.

Communication Major

B.A. Degree in Liberal Arts and Sciences OR Applied Arts and Sciences

(Major Code: 06011)

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." Selecting a Bachelor of Arts degree in liberal arts and sciences requires meeting the foreign language requirement. Selecting a Bachelor of Arts degree in applied arts and sciences requires either the foreign language or the mathematics competency requirement.

The B.A. in Communication provides in-depth study of varied forms of mediated and non-mediated human communication. To accommodate a broad range of student interests and professional aspirations, the major encompasses three impacted emphases in professional media studies, as well as five specializations that are not impacted.

Emphases: The four emphases prepare professionals to work in the management of organizational communication and in the management of communication organizations. The emphases provide students with the theory, principles, skills, and experience needed to work in advertising, public relations, media management, and telecommunications and film. Advertising emphasis graduates are employed in advertising agencies and marketing departments; as media advertising sales representatives; and in sales, sales promotion, and sales management positions. Media management emphasis graduates typically work in sales, programming, and management positions for television, radio, cable, film, and telecommunications organizations. Public relations emphasis graduates work as media relations specialists and strategic planners in public relations firms, as internal and external communication specialists in corporations, as public information specialists in government agencies and the military, and in fundraising and membership development for not-for-profit organizations. Telecommunications and film emphasis graduates find employment in a variety of policy, regulation, production, programming, and management positions in media and telecommunications organizations (see also the B.S. degree in television, film and new media production). A minor outside the School of Communication is not required for the advertising and public relations emphases, but students in those emphases must complete specified courses outside the school. A foreign language is required for all four emphases.

Specializations: The areas of specialization focus the study of organizing principles and patterns of social life through observation, analysis, and criticism of human interactions, communication behavior, mediated systems, and technological innovations. Five specializations are offered: applied communication studies, critical-cultural studies, interaction studies, intercultural and international studies, and new media studies. In these specializations, attention is drawn to the distinctive character of communication across diverse activities, relationships, organizations, media, and cultures. Each specialization offers a unique scholarly and creative focus for understanding communication phenomena. Students are encouraged to explore alternative methods and theories for communication inquiry within and across specializations and throughout the School of Communication curricula. Each specialization area requires common preparation at the lower division level and specializes at the upper division level. A minor is not required for any of the five specializations. The specialization in intercultural and international studies has a foreign language requirement. The other four specializations require a foreign language or a mathematics competency requirement.

Emphasis in Advertising With the B.A. Degree in Liberal Arts and Sciences (Premajor Code: 06040) (Major Code: 06041)

Impacted Program. The advertising emphasis is designated as an impacted program and specific regulations related to admissions are imposed. Students may enter the University under the pre-advertising major code (06040). Admission to the upper division advertising communication major code (06041) requires completion of 56 college units with a minimum overall grade point average of at least 2.5. Completion of all lower division preparation for the major courses with grades of C (2.0) or better (may be satisfied by comparable courses in community colleges or other institutions with which the university has articulation agreements). A passing score on the Journalism Grammar, Spelling, and Punctuation (GSP) test. A composite score may be used to determine order of admission to the advertising emphasis.

Students selecting this emphasis are not required to complete a minor.

Preparation for the Major. Communication 200; Journalism 220; Economics 101; Political Science 101, 102. Some of these courses also may be used to fulfill lower division general education requirements. (15 units)

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Communication 310W or Journalism 310W with a grade of C (2.0) or better.

Major. A minimum of 45 upper division units to include Communication 300, 310W, 350, 440, 460, 461, 480, 489, 560, and 565; and one course from each of three clusters:

Advertising Contexts: Communication 307, 406, 408, 471, 506, 580, 589, 592, and Marketing 370.

Advertising Media: Communication 375, 430, 435, 540, and 590; and Journalism 530.

Advertising Special Topics: Communication 409, 490A, 500, 502, 504, 541, 555, and 585.

In addition, students in the advertising emphasis are required to take six units of upper division coursework selected with the approval of the adviser from one of the following allied disciplines: economics, management, marketing, political science, psychology, and sociology.

Emphasis in Media Management With the B.A. Degree in Liberal Arts and Sciences (Premajor Code: 06030) (Major Code: 06032)

Students selecting this emphasis are required to complete a minor outside the School of Communication.

Preparation for the Major. Communication 200 and 265; Journalism 220 or Television, Film, and New Media 110; Economics 101; Political Science 101, 102. Some of these courses also may be used to fulfill lower division general education requirements. (18 units)

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination, or Communication 310W, or Journalism 310W, or Rhetoric and Writing Studies 305W with a grade of C (2.0) or better.

Major. A minimum of 30 upper division units to include Communication 300, 310W, 350, 440, 460, 480, and 489. Nine units selected from Communication 375, 406, 408, 430, 435, 490A, 500, 501, 502, 504, 505, 575, 591, 596; Educational Technology 540, 541; Journalism 300, 530; or complete one of the following:

Multimedia: Communication 375, Educational Technology 540 and 541.

Electronic Media: Communication 505, 591, and either 430 or 435.

Telecommunications: Communication 375, 501, and 575.

News: Communication 502, Journalism 300 and 530.

Emphasis in Public Relations With the B.A. Degree in Liberal Arts and Sciences (Premajor Code: 05990) (Major Code: 05992)

Impacted Program. The public relations emphasis is designated as an impacted program and specific regulations related to admissions are imposed. Students may enter the University under the public relations premajor code (05990). Admission to the upper division public relations communication major (05992) requires completion of 56 college units with a minimum overall grade point average of at least 2.5. Completion of all lower division preparation for the major courses with grades of C (2.0) or better (may be satisfied by comparable courses in community colleges or other institutions with which the University has articulation agreements). A passing score on the Journalism Grammar, Spelling, and Punctuation (GSP) test. A composite score may be used to determine order of admission to the public relations emphasis.

Students selecting this emphasis are not required to complete a minor.

Preparation for the Major. Communication 200; Journalism 220; Economics 101; Political Science 101, 102. These courses also may be used to fulfill lower division general education requirements. (15 units)

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Communication 310W or Journalism 310W with a grade of C (2.0) or better.

Major. A minimum of 45 upper division units to include Communication 300, 310W, 350, 440, 460, 480, 481, 489, 581, and 585; nine units selected from Communication 406, 490A, 500 or any other upper division School of Communication courses. In addition, majors in the public relations emphasis are required to take an additional six units in an allied area of study to include one course selected from Management 350, Marketing 370, and one course selected from Political Science 334, 335, 338, 425, 426, 531.

**Emphasis in Telecommunications and Film
With the B.A. Degree in Liberal Arts and Sciences
(Premajor Code: 06034) (Major Code: 06033)**

Impacted Program. The telecommunications and film emphasis is designated as an impacted program and specific regulations related to admissions are imposed. Students may enter the University under the pretelecommunications and film major code (06034) and then proceed to complete the steps to become admitted to the emphasis in telecommunications and film (06033).

Students selecting this emphasis are required to complete a minor outside the School of Communication.

Preparation for the Major. Communication 100; Television, Film, and New Media 110, 160; and six units selected from Television, Film, and New Media 121, 122, 123. (15 units)

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination, or Communication 310W, or Journalism 310W, or Rhetoric and Writing Studies 305W with a grade of C (2.0) or better.

Major. A minimum of 24 upper division units to include Communication 300, 350, 440, 460, and 480; and nine units of upper division electives in the School of Communication approved by the adviser.

**Specializations in Communication
With the B.A. Degree in Liberal Arts and Sciences
OR with the B.A. degree in Applied Arts and
Sciences
(Major Code: 15061)**

All five specializations in the communication major require common preparation at the lower division level, common foreign language or mathematics competency requirement, and common upper division writing requirement.

The five specializations in the communication major do not require a minor.

Preparation for the Specializations. Nine units selected from Communication 100, 105, 200, 265; and Communication 160 or 204. (12 units)

Foreign 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 section of catalog on "Graduation Requirements."

Mathematics Competency Requirement. Not available to students in Intercultural and International Studies. Competency in mathematics, equivalent to what is normally attained through three consecutive courses of university study, must be satisfied by three semesters of college mathematics or a statistical sequence such as Statistics

250, 350A, 350B (highly recommended); or Political Science 201*, 515A, 515B; or Sociology 201*, 406, 407.

Upper Division Writing Requirement. Passing the University Writing Examination, or Communication 310W, or Journalism 310W, or Rhetoric and Writing Studies 305W with a grade of C (2.0) or better."

* Additional prerequisites required.

Specialization in Applied Communication Studies

The specialization in applied communication studies offers a generalized preparation for students for the professional world. It introduces students to the contexts of the professional world of communication, giving priority to clarifying relationships among basic research, theory, and applied concerns in the workplace. Recognizing the increasingly important need for strong oral and written communication skills, this specialization is well suited for those students intending to enter careers such as sales, management, training, personnel, and human resources, as well as various careers in medical and legal settings.

Major. A minimum of 45 upper division units to include Communication 300, 350; 3-9 units from Communication 307, 391, 490B; 9-24 units from Communication 302 (maximum 2 units), 360, 361 (maximum 1 unit), 406, 407, 409, 455, 491, 503, 583, 584, 589; and an additional 12 or more units (to complete total of 45 required) selected from upper division courses in the School of Communication.

Specialization in Critical-Cultural Studies

The specialization in critical-cultural studies prepares students for a broad range of careers by developing intellectual and applied skills for understanding and affecting human communication and culture, ranging from interpersonal to media interactions. The degree offers a wide-ranging examination of criticism, culture, and communication. It develops the ability to think clearly and act effectively as preparation for careers as professional communicators, media critics, communication educators, agents of change, critics of rhetoric, interpreters of culture, and other areas of critical activity and culture. Critical studies and cultural studies have emerged in recent decades in numerous countries and various disciplines as important centers of intellectual activity. This specialization offers courses, concepts, and abilities that draw from these important developments and opens up a diverse set of opportunities.

Major. A minimum of 45 upper division units to include Communication 300, 350, 355; nine units selected from Communication 330, 360, 408, 450, 500, 501, 502, 589, Television, Film, and New Media 320; fifteen units selected from Communication 301, 302, 330, 360, 361, 371, 408, 409, 450, 452, 480, 483, 490B, 493, 496, 499, 500, 502, 504, 505, 506, 545, 555, 580, 589, 591, 592, 596; Television, Film, and New Media 320, 363, 364, 562; and 12 units selected from upper division courses in the School of Communication or other university courses approved in advance by the adviser in writing and filing a Request for Academic Adjustment form after completion of the courses.

Specialization in Interaction Studies

The specialization in interaction studies recognizes interaction as the original and fundamental communication process as well as the predominant means through which social life is accomplished. Systematic attention is given to the organization of interaction across diverse social relationships, activities, and contexts. The primary goals of interaction studies are to advance the scholarly understanding of human interaction in all its possible manifestations; articulate interactional relationships among theoretical, empirical, and practical communication issues and events; and promote methodological diversity and pluralism in the investigation of interactional phenomena. The interaction studies specialization is situated within an expanding interdisciplinary and international network of scholars examining language, conversation, nonverbal behavior, and the development of personal relationships.

Major. A minimum of 45 upper division units to include Communication 300, 350; six units from Communication 415, 445, or 530; 21 units from Communication 406, 407, 445, 452, 455, 483, 491, 496, 503, 530, 580, 583, 584, 592; and 12 units selected from upper division courses in the School of Communication.

Specialization in Intercultural and International Studies

With the B.A. Degree in Liberal Arts and Sciences ONLY

The increasing cultural diversity of the United States and the global interdependencies of nations and their media systems, requires people who can communicate across cultural and national boundaries. The specialization in intercultural and international studies is designed to increase student understanding of the effects of culture on face-to-face and mediated communication; prepare students for careers in intercultural and international advertising, education, management, media systems, and organizations; promote scholarly research and artistic creativity in all areas of intercultural and international communication; and prepare students to function in diverse intercultural and international contexts. This specialization has a foreign language requirement.

Major. A minimum of 45 upper division units to include Communication 300, 350, 371; 21 units from Communication 330, 355, 471, 479, 483, 493, 571, 591, Television, Film, and New Media 363; and 15 units selected from upper division courses in the School of Communication or other university courses approved in advance by the adviser in writing and filing a Request for Academic Adjustment form after completion of the courses.

Specialization in New Media Studies

New technology is transforming the communication landscape. This specialization will prepare students to work, communicate within, and understand an increasingly technological communication world. The specialization in New Media Studies will increase student understanding of new media technology and its cultural and commercial consequences; prepare students for careers in new media as well as traditional communication industries being transformed by new technology; promote scholarly research and artistic creativity in all areas of new media; and prepare students to function in diverse new communication environments.

Major. A minimum of 45 upper division units to include Communication 300, 350; 21 units from Communication 375, 440, 483, 505, 540, 555, 575, 596, Journalism 530; three units from one of the following areas: educational technology, computer science, or information and decision systems; and 15 units selected from upper division courses in the School of Communication.

Communication Major

In preparation for the Single Subject Teaching Credential in English/Speech

With the B.A. Degree in Applied Arts and Sciences (Major code: 15061)

All candidates for a teaching credential must complete all requirements as outlined in the section of this catalog on Policy Studies or Teacher Education.

This major may be used by the students in policy studies or teacher education as an undergraduate major for the B.A. degree in applied arts and sciences.

A minor is not required with this major.

Preparation for the Major. Communication 103, 105, 160; Linguistics 101; Rhetoric and Writing Studies 100, 200; three units selected from Comparative Literature 270A, 270B, or English 220; three units selected from either Humanities 140 or Theatre 120; three units selected from Communication 200, English 280, 281, Journalism 220, Theatre 115; and six units selected from the following pairs of courses: English 250A and 250B, or English 260A and 260B. (33 units)

Upper Division Writing Requirement. Passing the University Writing Examination, or English 508W or Rhetoric and Writing Studies 500W with a grade of C (2.0) or better.

Major. A minimum of 42 upper division units to include Communication 300, 302, 309B (3 units), 361, 371, 503, English 533, Rhetoric and Writing Studies 509; three units selected from Communication 360, 445, 450, 530, 589, or 592; three units selected from Comparative Literature 562, Theatre 310, or Theatre 480; three units selected from either Linguistics 420 or 530; three units selected from Africana Studies 460, 461, 462, 463, 464, American Indian Studies 430, Chicana and Chicano Studies 335, 464, English 519, 520; three units selected from English 522, 523, 524, 525 (for students who have completed English 260A or 260B), 560A, 560B (for students who have completed English 250A or 250B); six units selected from any two of the following groupings (select one three unit course from two separate groups): Communication 360, 391, 407, 491; or English 541A, 541B, Theatre 460B; or Communication 408 or one upper division linguistics course.

Journalism Major

With the B.A. Degree in Liberal Arts and Sciences (Premajor Code: 06020) (Major Code: 06021)

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 multi-media environments.

The courses offered in the Journalism major are designed to give students a working knowledge of the skills, concepts, and values needed to succeed as competent professional communicators. They focus on the basic elements of factual and analytical writing, editing, communication law and theory, history, and responsibility in 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 on-line electronic publishing.

Impacted Program. The journalism major is designated as an impacted program and specific regulations related to admissions are imposed. Students may enter the University under the "prejournalism" major code (06020) and then proceed to complete the steps to become admitted to the journalism major (06021). Steps include completing 56 units with an overall minimum grade point average of 2.5; passing the Journalism Grammar, Spelling, and Punctuation (GSP) test or the Extended Studies course "Grammar for Journalists" and completing Communication 200 and Journalism 220 with grades of C or better.

Students are required to achieve a passing score on the Journalism Grammar, Spelling, and Punctuation test or demonstrate satisfactory completion of the Extended Studies course, "Grammar for Journalists," before enrolling in most journalism courses. Students in the journalism premajor are encouraged to complete all general education courses first.

Lower division activity/production courses in newspaper, magazine, yearbook, or broadcasting may not be applied toward the B.A. in journalism.

A minor is not required with this major.

Preparation for the Major. Communication 200, Journalism 220. (6 units)

Foreign 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 section of this catalog on "Graduation Requirements."

Upper Division Writing Requirement. Journalism 310W or Rhetoric and Writing Studies 305W with a grade of C (2.0) or better.

Major. A minimum of 46 upper division units to include Communication 300, 350, 500 or 502, Journalism 300, 310W, 315, 420, 529, 550; nine units selected from any upper division courses in communication; seven units of upper division electives selected from any upper division courses in journalism; and nine units must be completed in an academic area outside the School of Communication (a maximum of six lower division units are acceptable). Journalism students should contact the journalism undergraduate adviser for information about appropriate courses.

Journalism Major

In preparation for the Single Subject Teaching Credential in English/Journalism

**With the B.A. Degree in Liberal Arts and Sciences
(Premajor Code: 06020) (Major Code: 06021)**

All candidates for a teaching credential must complete all requirements as outlined in the section of this catalog on Policy Studies or Teacher Education.

Impacted Program. The journalism major in preparation for the single subject teaching credential in English/journalism is designated as an impacted program and specific regulations related to admissions are imposed. Consult the School of Communication for regulations and admissions criteria.

A minor is not required with this major.

Preparation for the Major. Communication 200, Journalism 220, Linguistics 101, Rhetoric and Writing Studies 100 and 200; three units selected from Comparative Literature 270A, 270B, or English 220. Three units selected from Humanities 140 or Theatre 120; six units selected from the following pairs of courses: English 250A and 250B, or 260A and 260B. (27 units)

Foreign 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 section of this catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination, or Communication 310W, or Journalism 310W, or Rhetoric and Writing Studies 305W with a grade of C (2.0) or better.

Major. A minimum of 54 upper division units to include Communication 300, 371, 460, 502, Journalism 300, 315, English 533, Rhetoric and Writing Studies 509; 12 units selected from Communication 408, 490A, 500, Journalism 420, 425, 441, 470, 530, 550; three units selected from Comparative Literature 562, Theatre 310, 480; six units selected from Communication 360, 391, 407, 491, English 541A, 541B, Theatre 460B, or one upper division linguistics course; three units selected from Linguistics 420 or 530; three units selected from Africana Studies 460, 461, 462, 463, 464, American Indian Studies 430, Chicana and Chicano Studies 335, 464, English 519, 520; three units selected from the following: English 522, 523, 524, 525 (for students who took English 260A or 260B), 560A, 560B (for students who took English 250A or 250B).

Television, Film, and New Media Production 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."

The B.S. degree is designed to prepare students for professions in television, film and new media production. The degree 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.

A minor is not required with this major.

Impacted Program. The television, film, and new media production major is designated as an impacted program and has enrollment limitations and requires additional application procedures. Contact the School of Communication office for admissions criteria and procedures.

Preparation for the Major. Communication 100; Television, Film, and New Media 110, 121, 122, 123, 160, 250, 260, and 261. (27 units)

Upper Division Writing Requirement. Passing the University Writing Examination, or Communication 310W, or Journalism 310W, or Rhetoric and Writing Studies 305W with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units to include: Communication 300, 350, Television, Film, and New Media 320, 401, 410, 560 or 561; nine units selected from Communication 330, 435, 490A, or Television, Film, and New Media 321, 469, 522, 550, 551, 560, 561, 562. Six units must be selected from one allied professional sequence listed below, and an additional three units of electives from upper division courses in the School of Communication. A course used to fulfill a major requirement as listed above may not also be used as the six units needed in an allied professional sequence.

Allied Professional Sequences

(NOTE: Additional prerequisites may be required for courses in these sequences)

Advertising and Public Relations: Communication 460, 480, 540; Marketing 370, 472; Psychology 322.

Communication: Communication 307, 360, 371, 406, 407, 445, 491, 580, 585, 592; Political Science 426; Psychology 321, 326, 340; Sociology 410, 430, 537.

Criticism: Linguistics 551; Music 351; Philosophy 523, 531, 541, 542.

Educational Technology: Educational Technology 540, 541, 544.

Film Literacy: Television, Film, and New Media 363, 364, 562; English 493; History 435.

International Media: Communication 371, 591; Television, Film, and New Media 363; English 548; Geography 312; Political Science 375, 481.

Law and Government: Communication 502, 505; Political Science 335, 346, 347A or 347B.

Management: Communication 406, 435, 440, 480, 489, 501; Management 350, 352, 356, 405.

Mass Communication: Communication 408, 440, 501; Television, Film, and New Media 562; Political Science 310; Psychology 322; Sociology 335, 406, 410, 430, 450, 456.

News: Communication 502, 505; Journalism 310W, 420, 425, 470, 529.

Performance: Communication 592; Television, Film, and New Media 390; Theatre 431, 446A, 446B, 446C, 532.

Playwriting: English 577, 579 (screenplay), 581W, 587; Theatre 325.

Production Design and Management: Television, Film, and New Media 550, 551; Psychology 320, 321; Theatre 440, 448, 540.

Research Methods: Communication 489, 590; Information and Decision Systems 301; Psychology 370; Sociology 406, 407.

Telecommunications: Communication 375, 501, 575.

Advertising Minor

The minor in advertising consists of 21 units to include Communication 200, 310W, 460, 461, 560, 565 and Journalism 220. Requirements for admission to the advertising minor are completion of at least 45 units with a minimum grade point average of 3.0 overall and completion of Communication 200 with a grade of B or better. Students are required to achieve a passing score on the Journalism Grammar, Spelling, and Punctuation (GSP) test. Contact the School of Communication for admissions criteria and procedures.

Communication

Courses in the minor may not be counted toward the major but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed at San Diego State University

Communication Minor

The minor in communication consists of a minimum of 21 units to include six units from Communication 100, 105, 160, 200, 204, or 265; Communication 300, 350; and nine upper division units in the School of Communication.

Courses in the minor may not be counted toward the major but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed at San Diego State University

Journalism Minor

The minor in journalism consists of 21 units to include Communication 200, Journalism 220, 300, 310W, 315, 420; and either Communication 500 or 502. Requirements for admission to the journalism minor are completion of at least 56 units with a minimum grade point average of 2.5 overall, completion of Communication 200 and Journalism 220 with grades of C or better, and a passing score on the Journalism Grammar, Spelling, and Punctuation (GSP) test or demonstrate satisfactory completion of the Extended Studies course, "Grammar for Journalists." Contact the School of Communication for admissions criteria and procedures.

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.

Media Management Minor

The minor in media management consists of 18 units to include Communication 200, 375, 440, 489, 501 and 575. Requirements for admission to the minor are completion of at least 45 units with a minimum grade point average of 3.0 overall and completion of Communication 100 or 200 with a grade of B or better. Contact the School of Communication for admission criteria and procedures.

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.

Public Relations Minor

The minor in public relations consists of 21 units to include Communication 200, 310W, 480, 481, 489, 585, and Journalism 220. Requirements for admission to the minor are completion of at least 45 units with a minimum grade point average of 3.0 overall and completion of Communication 200 with a grade of B or better. Students are required to achieve a passing score on the Journalism Grammar, Spelling, and Punctuation (GSP) test or demonstrate satisfactory completion of the Extended Studies course, "Grammar for Journalists," before enrolling in most journalism courses. Contact the School of Communication for admission criteria and procedures. 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.

Television, Film, and New Media Minor

The minor in television, film, and new media consists of 18 units to include Communication 100, Television, Film, and New Media 160, 320, 363, and six units of upper division electives in Television, Film, and

New Media. Requirements for admission to the minor are completion of at least 30 units with a minimum grade point average of 3.0 overall and a grade of B or better in Communication 100 or Television, Film, and New Media 160. Contact the School of Communication for admission criteria and procedures.

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

LOWER DIVISION COURSES IN COMMUNICATION

(Unless otherwise noted, all Speech Communication courses are now listed as Communication courses.)

90. Improving Speaking Confidence (1) Cr/NC I, II

Two hours of activity.

Prerequisite: Must be taken prior to or concurrent with Communication 103.

Anxiety reduction and skill enhancement for students experiencing anxiety in oral communication situations. Not applicable to a bachelor's degree or general education. (Formerly numbered Speech Communication 102.)

100. Survey of Telecommunications (3) I, II

Theory and operation of the broadcasting industry to include the history and regulation of broadcasting in the U.S., the social and economic setting of American broadcasting and the organization of commercial and educational radio and television stations. (Formerly numbered Telecommunications and Film 100.)

103. Oral Communication (3) I, II (CAN SPCH 4)

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.

105. Introduction to the Discipline of Communication (3) I, II

Communication as an academic and professional discipline, its associations and journals, history and traditions, relationships to other disciplines, research methodologies, and careers for graduates. Intended for students who are either considering or who are communication majors or minors. This course should be completed as soon as possible.

160. Argumentation (3) I, II (CAN SPCH 6)

Argument as a form of discourse; organizing, supporting, presenting and refuting arguments in a variety of formats; evaluating argument, including common fallacies in reasoning.

200. Introduction to Mass Communication (3) (CAN JOUR 4)

Mass media and their interrelationships. The media and the consumer. Value and function of the mass media, particularly news media, in contemporary society. Problems and responsibilities. (Formerly numbered Journalism 200.)

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. Not open to students with credit in Chicana and Chicano Studies 111A.

265. New Media Technology (3)

Two lectures and two hours of activity.

Nature, origins and consequences of new media technology on human communication, communication industries, and audiences. Computers will be in a networked environment.

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 IN COMMUNICATION
(Intended for Undergraduates)**

300. Integrating Communication: Theories and Principles (3)

Prerequisite: Upper division standing.

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.

**301. Management of School of Communication
Activities (1) Cr/NC I, II**

Two hours of activity.

Prerequisite: Communication 103.

Planning, preparation, and supervision of speech tournaments and other interscholastic activities. Maximum credit two units.

302. Contemporary Forensics Problems (2) Cr/NC I, II

Prerequisites: Communication 103 and 160.

Identification of significant arguments in political, economic, and social problems confronting twentieth century United States. Use of case studies to emphasize research tools leading to comprehensive analysis. Oral performance stressed. See Class Schedule for specific content. Maximum credit eight units.

307. Communication in Professional Settings (3)

Prerequisites: Communication 103, 105, and 160 or 204.

Communication principles in professional contexts including interviewing and technical and nontechnical oral presentations. Skill in meeting management.

**309A-309B. Workshop (1-3, 1-3) (309A = Cr/NC;
309B = letter grade)**

Prerequisites: Communication 103, 105, 204, and 307 or 361; and consent of instructor.

Practical experience in an area of study within the School of Communication. Maximum credit six units.

310W. Gathering and Reporting Information (3)

Two lectures and two hours of activity.

Prerequisites: Journalism 220 or Television, Film, and New Media 110 with grade of C (2.0) or better, and passing score on the Journalism Grammar, Spelling, and Punctuation (GSP) test. Satisfies University Upper Division Writing requirement for students who have completed 60 units, fulfilled the Writing Competency requirement, and completed the General Education requirement in Communication and Critical Thinking. **Proof of completion of prerequisites required:** Test scores or verification of exemption; copy of transcript.

Information gathering and writing for mass communication in information age. Accessing on-line databases, records, and archives; observation; interviewing; and conducting literature reviews, writing presentations designed to inform, persuade, and instruct. (Formerly numbered Telecommunications and Film 310.)

330. Socio-Cultural Aspects of Media (3) I

Prerequisites: Communication 100 and Television, Film, and New Media 160.

Social and cultural dimensions of communication media. Media structures, uses, and effects at national and international levels. Critical and ethnical questions in a context of humanities and popular arts. Not open to students with credit in Journalism 408. (Formerly numbered Telecommunications and Film 330.)

350. Communication Methodologies (3)

Prerequisite: Upper division standing.

Study of human communication, from methodological and epistemological perspectives.

355. Foundations of Critical and Cultural Study (3)

Prerequisite: Credit or concurrent registration in Communication 300 and 350.

Central concepts, examples, theories, and experiences of critical studies of communication in culture through cultural, rhetorical, and media literature and cases.

360. Argumentation Theory (3)

Prerequisites: Communication 103 and 160.

Approaches to argument and the patterns and problems in argument. Consideration of implications for society. Written and oral reports.

361. Intercollegiate Forensics (1) Cr/NC I, II

Two field trips required.

Prerequisite: Communication 103.

Three hours of activity and two coaching hours to be assigned. Credit for participation in intercollegiate program. Maximum credit four units.

371. Intercultural Communication (3) I, II

Prerequisites: Communication 103; and completion of the General Education requirement in Foundations 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. (Formerly numbered Speech Communication 475.)

375. Infrastructure of the Information Age (3) I

Prerequisites: Communication 100 or 265; basic computer literacy.

Technologies and institutions critical to those responsible for communication and information in an information society. Practical experience with on-line computer activities. (Formerly numbered Telecommunications and Film 375.)

391. Parliamentary Procedure (3)

Prerequisite: Communication 103.

Techniques and procedures for formal meeting management, with emphasis on leadership, rules, communication skills and strategies.

406. Organizational Communication (3)

Prerequisite: Completion of preparation for the specializations in communication.

The organization as a communication system; role of the organization in persuasive campaigns; communication strategies and problems within the organizational structure.

407. Communicative Perspectives on Interviewing (3)

Prerequisite: Completion of preparation for the specializations in 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.

408. Mass Communication and Society (3)

Prerequisites: Upper division standing, and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences.

Social factors underlying nature, functions of mass media. Theories, models, research in media as culture carriers, opinion shapers; other societal interrelationships. (Formerly numbered Journalism 408.)

409. Women in Mass Communication (3)

Prerequisite: Upper division standing.

Role of women in mass communication including messages about women and employment status of women.

415. Nonverbal Communication (3)

Prerequisite: Completion of preparation for the specializations in communication.

Theory and research on nonverbal aspects of communication, with emphasis on codes and functions.

430. Radio Programming (3) II

Two lectures and three hours of scheduled activity.

Prerequisites: Communication 100 and Television, Film, and New Media 121. **Proof of completion of prerequisites required:** Copy of transcript.

Formats, policies, production practices and research in modern programming. Student work is broadcast on KPBS-FM. (Formerly numbered Telecommunications and Film 530.)

435. Television Programming (3) I

Prerequisite: Communication 100.

Structure of television programming. Problems such as ratings, advertisers and scheduling. Social effects and criticism of television programming. (Formerly numbered Telecommunications and Film 535.)

440. Principles of Media Management (3)

Prerequisite: Upper division standing.

Revenue generation, marketing, production programming, social responsibilities, and current developments in mass media. Planning, organizing, actuating, and controlling in electronic media organizations. (Formerly numbered Telecommunications and Film 500.)

445. Relational Communication (3)

Prerequisite: Completion of preparation for the specializations in 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.

450. Rhetorical Theory (3)

Prerequisite: Completion of preparation for the specializations in communication.

Development of rhetorical theory as a mechanism for generating and understanding public discourse. Theories from ancient Greece to the present.

452. Interaction and Gender (3)

Prerequisite: Completion of preparation for the specializations in 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.

455. Conflict Management Communication (3)

Prerequisite: Completion of preparation for the specializations in communication.

Approaches to conflict communication in international, societal, group, institutional, and interpersonal contexts.

460. Principles of Advertising (3) I, II

Prerequisite: Upper division standing.

Concepts, history, theory, social responsibility, management, and regulation of advertising. Survey of advertising practices, including planning, consumer and market research, creative, and media. (Formerly numbered Journalism 460.)

461. Advertising Creative Development (3) I, II

One lecture and four hours of activity.

Prerequisites: Communication 310W and 460 with grades of C (2.0) or better. **Proof of completion of prerequisites required:** Copy of transcript. Limited to Advertising majors and minors, Major Code: 06041.

Advertising creative philosophy, strategy, and tactics; art, copy, and creation of advertisements for broadcast, print, and interactive electronic media. Application of computers to creative development. (Formerly numbered Journalism 463.)

471. Communication Among U.S. Cultures (3)

Prerequisite: Completion of preparation for the specializations in communication and Communication 371.

Effects of code systems, sociocultural forces, geographic influences, cultural patterns, ethnolinguistic identities, and acculturation experiences on interethnic and interracial relationships in the United States.

479. Organizational Communication Across Cultures (3)

Prerequisite: Completion of preparation for the specializations in communication.

Cultural and ethnic differences in management styles, communication patterns, intercultural negotiations, leadership techniques, conflict management, and work-related values in organizations.

480. Principles of Public Relations (3) I, II

Prerequisite: Upper division standing.

Concepts, history, theory, social responsibility, and management of public relations. Survey of problems and practices in corporations, government agencies, associations, and not-for-profit organizations. (Formerly numbered Journalism 480.)

481. Public Relations Media and Methods (3) I, II

One lecture and four hours of activity.

Prerequisites: Communication 310W and 480 with grades of C (2.0) or better. **Proof of completion of prerequisites required:** Copy of transcript. Limited to Public Relations majors and minors, Major Code: 05992.

Practical applications of public relations techniques with emphasis on writing and media usage. News releases and media relations, print and electronic communications production, multi-media techniques; speeches and other audio-visual presentations, and special events. Field and laboratory practice. (Formerly numbered Journalism 481.)

483. Communication in Virtual Reality (3)

Prerequisite: Completion of preparation for the specializations in communication.

Interpersonal, romantic, commercial, organizational, and entertainment implications of virtual environments.

489. Research Methods in Mass Communication (3) II

Prerequisites: Credit or concurrent registration in Communication 440, 460, or 480.

Research methods for decision making in professional mass communication practices. Research settings, methods of observation, and measurement, data analysis, and interpretation, research reports, and application of research findings. (Formerly numbered Journalism 509.)

490A-490B. Internship (1-3, 1-3)

(490A =Cr/NC; 490B = letter grade)

Prerequisites: See Class Schedule for prerequisites specific to your area of study. Internship contract must be completed prior to registration.

Students work at approved agencies off-campus under the combined supervision of agency personnel and instructors. Maximum credit three units for Communication 490A-490B. (Formerly numbered Journalism 490.)

491. Group Interaction (3)

Prerequisites: Communication 300 and 350.

Research, theory, and observation of group emergence, development, relationships, interaction, and decision making across diverse settings.

493. Ethnography and Communication (3)

Prerequisite: Completion of preparation for the specializations in 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. (Formerly numbered Speech Communication 593.)

496. Experimental Topics (1-4)

Experimental topics. See Class Schedule for specific content. May be repeated with new content. Limit of nine units of any combination of 296,496, 596 courses applicable to a bachelor's degree.

499. Special Study (1-3)

Prerequisites: See Class Schedule footnotes for prerequisites specific to your area of study. 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 IN COMMUNICATION
(Also Acceptable for Advanced Degrees)**

500. Current Problems in Mass Communication (3)

Prerequisites: Communication 440, 460, or 480 or Journalism 300; and at least 12 units of upper division coursework in communication.

Problems and topics in mass communication. Ethics, social responsibility, professionalism, multi-cultural issues, international media systems and audiences, global markets, and technology. (Formerly numbered Journalism 500.)

501. Management of Telecommunications Systems (3) II

Prerequisite: Communication 375 or 440 or admission to the graduate program. **Proof of completion of prerequisite required:** Copy of transcript.

Organization and administration of telecommunications systems, with emphasis on structure, policy environment, and principal institutions affecting telecommunications industries. (Formerly numbered Telecommunications and Film 501.)

502. Law of Mass Communication (3)

Prerequisites: Communication 100 or 200 or Political Science 102, and upper division standing.

Libel, invasion of privacy, censorship, contempt of court, pornography. Constitutional guarantees affecting print and broadcast media. Government restrictions. (Formerly numbered Journalism 502.)

503. Instructional Communication (3)

Prerequisites: Communication 105 and 160. **Proof of completion of prerequisites required:** Copy of transcript.

Communication messages and strategies as they apply to instructional contexts. Communication within traditional instructional contexts and focus on training programs, adult workshops, and other less traditional information dissemination situations.

504. History of Mass Communication (3)

Prerequisites: Communication 100 or 200 or History 110A or 110B, and upper division standing.

American journalism from colonial times to the present, with special attention to twentieth century trends and developments, including the emergent concept of social responsibility. (Formerly numbered Journalism 503.)

505. Government and Telecommunications (3) II

Prerequisite: Twelve upper division units in communication. Responsibilities of telecommunication organizations as prescribed by law, government policies and regulations, and significant court decisions. (Formerly numbered Telecommunications and Film 505.)

506. Advertising and Society (3)

Prerequisites: Communication 300 and 350. Theoretical and philosophical analysis of advertising in modern society.

530. Conversational Interaction (3)

Prerequisite: Completion of preparation for the major in communication or admission to the graduate program.

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.

540. Media Management Research (3)

Two lectures and two hours of activity. Prerequisite: Communication 489. Applying research in cable, film, radio, television and telecommunications management. Designs, methodologies, analyses, and applica-

tions of audience, programming, and advertising research. (Formerly numbered Telecommunications and Film 400.)

541. Advanced Creative Production (3)

One lecture and four hours of activity. Prerequisites: Communication 461 or 481; and consent of instructor.

Design and production of print and electronic advertising and public relations messages. Creative strategy and evaluation. Print, film and video techniques. Maximum credit six units.

545. Communication and Rhetorical Movements (3)

Prerequisite: Completion of preparation for the specializations in communication or admission to the graduate program.

Historical perspective of role of communication in social change in rhetorical movements and social change.

555. New Media Production (3)

Two lectures and three hours of activity. Prerequisite: Upper division standing or admission to the graduate program.

Development of audio visual/communication products in new media formats. Multi-media laboratory use to be arranged.

560. Advertising Research (3) I

Two lectures and two hours of activity. Prerequisites: Communication 460 and 489.

Systematic application of quantitative and qualitative research to planning, design and management of advertising campaigns. Cases, practices, and problems in application of research to consumer and market analysis, positioning, creative selection, media planning and campaign evaluation. (Formerly numbered Journalism 465.)

565. Advertising Campaigns (3) II

Prerequisites: Communication 461 and 560. Planning and creation of advertising campaigns including situation analysis and strategy, advertising and marketing objectives, consumer analysis and target audience selection, creative development, media strategy and tactics, sales promotion and campaign evaluation. (Formerly numbered Journalism 466.)

571. Intercultural Communication Theory (3)

Prerequisite: Completion of preparation for the major in communication and Communication 371, or admission to the graduate program.

Theories of cross-cultural and intercultural communication, including ethnic identity, communication competence, and cultural values.

574. International Advertising (3)

Prerequisites: Communication 300, 350, and six upper division units in School of Communication courses.

Comparative cultural, economic, legal, political, and social conditions relevant to international advertising. Not open to students with credit in Communication 474.

575. Technological Trends in Telecommunication (3)

Prerequisite: Completion of preparation for the majors in communication, or television, film and new media production, or admission to graduate program.

Developments and trends in telecommunication and related technology, with implications for the future. Practical experience with on-line computer activities. (Formerly numbered Telecommunications and Film 575.)

580. Communication and Politics (3)

Prerequisites: Communication 105 and 160. **Proof of completion of prerequisites required:** Copy of transcript.

Contemporary political communication events and processes, with a focus on speeches, debates, and campaigns.

581. Public Relations Research (3) I

Two lectures and two hours of activity. Prerequisites: Communication 480 and 489. Qualitative and quantitative methods used in evaluation research to plan, track, and evaluate public relations programs. Computerized statistical analysis.

583. Medical Interaction (3)

Prerequisites: Communication 300 and 350.

Theoretical and applied approaches to health communication including interactional patterns among doctors, nurses, patients, family members, therapists, counselors, clients. Not open to students with credit in Speech Communication 584.

584. Legal Interaction (3)

Prerequisites: Communication 300 and 350.

Interactional patterns among judges, lawyers, witnesses, juries, and related legal personnel. Implications for understanding constraints on exchange within institutional interaction and social justice as a practical accomplishment.

585. Professional Practices in Public Relations (3) II

Prerequisites: Communication 581 and credit or concurrent registration in Communication 481.

Advanced cases in public relations management. Theory and practice of issues management, integration of the public relations function in strategic management in a variety of corporate, governmental, non-profit, social and cultural organizations. (Formerly numbered Journalism 585.)

589. Ethical Issues in Communication (3)

Prerequisites: Communication 105 and 160. **Proof of completion of prerequisites required:** Copy of transcript.

Classical and modern ethical concepts and issues in communication.

590. Quantitative Methods in Communication (3)

Prerequisites: Communication 105 and 160. **Proof of completion of prerequisites required:** Copy of transcript.

Philosophy of social science, research design, and statistical applications to communication problems.

591. International Telecommunications (3) I

Prerequisite: Twelve upper division units in School of Communication or admission to the graduate program.

Comparative study of economic, social, and political determinants of broadcasting and telecommunication systems around the world. (Formerly numbered Telecommunications and Film 590.)

592. Persuasion (3)

Prerequisite: Communication 103. Open to majors and nonmajors.

Key variables and theories in the persuasion process: persuasive sources, messages, receiver variables, propaganda, brainwashing, and cognitive, behavioral, and social theories of persuasion. Not applicable to the M.A. degree in communication.

596. Selected Topics (1-4)

Prerequisite: Senior standing or above.

Specialized study in selected topics. 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. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

LOWER DIVISION COURSE IN JOURNALISM

220. Writing for the Mass Media (3) (CAN JOUR 2)

One lecture and four hours of activity.

Prerequisites: Sophomore standing; ability to type; and passing score on the Journalism Grammar, Spelling, and Punctuation (GSP) test or passing the Extended Studies course "Grammar for Journalists." **Proof of completion of prerequisites required:** GSP test score and proof of sophomore standing.

Introduction to writing techniques for mass media. Laboratory practice in informational and persuasive writing, evaluation, and judgment.

UPPER DIVISION COURSES IN JOURNALISM (Intended for Undergraduates)

NOTE: PROOF OF COMPLETION of prerequisites required for all upper division courses: GSP test score as applicable and copy of transcript.

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.

310W. Information Gathering and Reporting (3) I, II

Two lectures and two hours of activity.

Prerequisites: Journalism 220 or Television, Film, and New Media 110 with grade of C (2.0) or better; ability to type; and passing score on the Journalism Grammar, Spelling, and Punctuation (GSP) test or passing the Extended Studies course "Grammar for Journalists." Satisfies the University Upper Division Writing requirement for students who have completed 60 units, fulfilled the Writing Competency requirement, and completed the General Education requirement in Communication and Critical Thinking. **Proof of completion of prerequisites required:** Test scores or verification of exemption; copy of transcript.

Methods of interviewing and information gathering. Journalistic attitudes, ethics and skills. Questioning and listening. Press conferences. Nature of inference, supposition, skepticism and the adversary system. Quantification in reporting. Research resources, computer databases, and field experience.

315. News Writing and Editing (3) I, II

One lecture and four hours of activity.

Prerequisites: Communication 200 and Journalism 220 with minimum grades of C (2.0) in each course; upper division standing; ability to type; credit or concurrent registration in Journalism 300 and 310W; passing score on the Journalism Grammar, Spelling, and Punctuation (GSP) test or passing the Extended Studies course "Grammar for Journalists."

Specialized writing and editing techniques for news media. Field and laboratory practice. (Formerly numbered Journalism 326.)

420. Public Affairs News Reporting (3) I

One lecture and four hours of activity.

Prerequisites: Journalism 300, 310W, 315 with minimum grades of C (2.0) in each course; upper division standing; ability to type; and passing score on the Journalism Grammar, Spelling, and Punctuation (GSP) test or passing the Extended Studies course "Grammar for Journalists."

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. (Formerly numbered Journalism 320.)

425. Editorial and Critical Writing (3)

Prerequisites: Journalism 420; upper division standing; and passing score on the Journalism Grammar, Spelling, and Punctuation (GSP) test or passing the Extended Studies course "Grammar for Journalists."

Principles and practices in editorial and critical writing. Editorials, columns and commentary. Analysis and interpretation.

441. Magazine Article Writing (3) I, II

Prerequisites: Upper division standing; and passing score on the Journalism Grammar, Spelling, and Punctuation (GSP) test or passing the Extended Studies course "Grammar for Journalists."

Planning, gathering material, writing and marketing articles for specialized and general publications. Production of expository articles and marketing of at least one.

470. Radio-Television News Writing and Editing (3) I, II

One lecture and four hours of activity.

Prerequisites: Journalism 300, 310W, 315 with minimum grades of C (2.0) in each course; or Television, Film, and New Media 110; upper division standing; ability to type; passing score on the Journalism Grammar, Spelling, and Punctuation (GSP) test or passing the Extended Studies course "Grammar for Journalists."

Application of radio and television news writing principles and techniques. Emphasis in news scriptwriting using audio and video.

490. Internship in Journalism (1-3) Cr/NC

Prerequisites: Upper division standing, consent of instructor, and Journalism 420.

Supervised work at news media organizations under the combined direction of practitioners and professors. Maximum credit three units.

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. No more than three units in Journalism 496 may apply to the degree in journalism.

499. Special Study (1-3)

Prerequisites: Upper division standing; consent of instructor; and satisfactory score on departmental grammar, spelling, and punctuation test.

Individual study or project, normally in a research area selected by the student. Maximum credit three units.

**UPPER DIVISION COURSES IN JOURNALISM
(Also Acceptable for Advanced Degrees)**

529. Investigative Reporting (3)

One lecture and four hours of activity.

Prerequisites: Journalism 420 with minimum grade of C (2.0); upper division standing; passing score on the Journalism Grammar, Spelling, and Punctuation (GSP) test or passing the Extended Studies course "Grammar for Journalists."

Development of articles of substance and depth in specialized areas. Research, analysis and interpretation of complex issues in the news. Special problems of the sustained, reportorial effort. Field and laboratory practice.

530. Management of News Organizations (3)

Prerequisites: Senior standing and twelve upper division units in journalism.

Role of manager in journalism and journalism-related organizations. Interaction of news, entertainment, advertising, circulation, production, and promotion functions as related to economic demands.

550. News Production (3)

One lecture and four hours of activity.

Prerequisites: Journalism 420 with minimum grade of C (2.0); and passing score on the Journalism Grammar, Spelling, and Punctuation (GSP) test or passing the Extended Studies course "Grammar for Journalists."

News production principles and techniques. Field and laboratory practice. Not open to students with credit in Journalism 443 or 475.

**LOWER DIVISION COURSES IN TELEVISION,
FILM, AND NEW MEDIA**

(Unless otherwise noted, all Telecommunications and Film courses are now listed as Television, Film, and New Media courses.)

110. Telecommunications and Film Writing (3) I, II

Prerequisites: Satisfaction of the English Placement Test and Writing Competency requirements. Ability to type. **Proof of completion of prerequisites required:** Copy of EPT or competency scores or verification of exemption; proof of Cr in Rhetoric and Writing Studies 97A or 97B, or notification from the Department of Rhetoric and Writing Studies. Limited to television, film, and new media production majors.

Theory and practice in writing for electronic and film media. Audience analysis, problems of timing, aural style, scripting techniques.

121. Audio Production (3) I, II

Two lectures and three hours of activity.

Prerequisite: Limited to television, film, and new media production majors.

Theory of audio production, use of basic audio equipment, and basic sound production. Practical experience in University sponsored productions.

122. Basic 16MM Film Production (3)

Two lectures and three hours of activity.

Prerequisite: Limited to television, film, and new media production majors.

Equipment and process of 16MM location film production, including video applications. Practical experience in University sponsored productions.

123. Basic Video and TV Production (3)

Two lectures and three hours of activity.

Prerequisite: Limited to television, film, and new media production majors.

Equipment and process of video and TV production. Emphasis on studio production. Use of TV control room, studio, auxiliary equipment, and integration of film and electronic media in production of programs. Practical experience in University sponsored productions.

160. Cinema as Art and Communication (3) I, II

An appreciative survey of cinema in its diverse forms. Historical and stylistic influences on the aesthetic values and social implications of cinema. Illustrated by screen examples.

250. Staging and Art for Television and Film (3)

Two lectures and three hours of activity.

Prerequisites: Television, Film, and New Media 122 or 123; theatre majors with design for television and film emphasis must have approval of the emphasis adviser. **Proof of completion of prerequisite required:** Change of major form or other evidence of acceptable major code in television, film, and new media or approval from design for television and film emphasis adviser in theatre. Students who cannot prove prerequisite completion will be administratively dropped from class.

Aesthetic considerations and technical practices in staging, lighting, and graphics for television and film. Practical experience in university sponsored productions.

260. Intermediate 16MM Film Production (3)

Two lectures and more than three hours of activity.

Prerequisites: Television, Film, and New Media 110, 121, 122, 123 with grade of C (2.0) or better. **Proof of completion of prerequisites required:** Copy of transcript.

Principles of film technique and theory. Focus on director's work in relation to cinematographer, sound designer, editor, producer. Development of short subject film, casting, directing, actors, and integration of electronic technologies. Practical experience in University sponsored sync-sound film productions.

261. Intermediate Video and TV Production (3)

Two lectures and more than three hours of activity.

Prerequisites: Television, Film, and New Media 110, 121, 122, 123 with grade of C (2.0) or better. **Proof of completion of prerequisites required:** Copy of transcript.

Practice of video and TV production. Emphasis on studio and sound stage. Includes application of film techniques into electronic media and basic television program types. Responsibilities of producer, director, production staff. (Formerly numbered Telecommunications and Film 280.)

**UPPER DIVISION COURSES IN TELEVISION,
FILM, AND NEW MEDIA
(Intended for Undergraduates)**

320. Film and Video Aesthetics (3) II

Prerequisite: Television, Film, and New Media Production 160.

Ways cinematic texts (films and video) work as language systems and complex cultural products. Major film and video theorists analyzed according to their contribution to the field.

321. Sound Design for Video and Film (3)

Two lectures and two hours of activity.

Prerequisites: Communication 100, Television, Film, and New Media 260.

Audio post-production and synchronization with the visual image for video, TV, and film. Includes field acquisition, Foley, editing and assembling.

325. Video and Film Production for Non-Majors (3) I, S

Two lectures and three hours of laboratory.

Prerequisite: Upper division standing.

Technical and aesthetic principles and practices applicable to non-fictional and fictional presentations by video and film. Practical experience in basic video and film production and postproduction techniques. Not open to television, film, and new media production majors.

327. Film and Video Editing (3)

One lecture and four hours of activity.

Prerequisites: Television, Film, and New Media 122 and 123.

Theory and practice of film and video editing. Execution of postproduction in film as well as classical and modern editing theories. Practical experience in University sponsored productions.

363. International Cinema (3) I, II

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

Foreign feature films as expression of national cultures. 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.

364. Film Classics (3) I, II

Prerequisite: Upper division standing.

Viewing and analysis of those American and foreign theatrical films, particularly of the sound era, which represent milestones in the development of the cinema. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

380. Images in Media: Race, Class, Gender (3)

Prerequisite: Television, Film, and New Media 160 or 363 or 364.

Race, class, and gender representation in media with emphasis on cross-cultural stereotyping. May be repeated with new content. Maximum credit six units.

390. Broadcast and Film Performance (3) II

Two lectures and three hours of activity.

Prerequisite: Theatre 110.

Preparation and delivery of materials before the microphone and camera. Practical experience in University sponsored productions.

401. Business Aspects of Television and Film Production (3) I, II

Prerequisites: Television, Film, and New Media 260 or 261 or 325. Usually taken concurrently with Television, Film, and New Media 560 or 561. **Proof of completion of prerequisites required:** Copy of transcript.

Financing, preproduction planning, and postproduction of television and film.

410. Script Writing for Television and Film (3)

Prerequisites: Television, Film, and New Media 260 or 261, and satisfaction of the English Placement Test and Writing Competency requirements. **Proof of completion of prerequisites required:** Test scores or verification of exemption; copy of transcript.

Development of a single program and series ideas. Scripting of dramatic original and adaptation forms, and the documentary.

469. Senior Project in Film and Video (3)

One lecture and more than six hours of activity.

Prerequisite: Consent of instructor.

Original and creative work demonstrating significant achievement in film and video production. Practical experience in University sponsored productions. Maximum credit six units.

UPPER DIVISION COURSES IN TELEVISION, FILM, AND NEW MEDIA (Also Acceptable for Advanced Degrees)

522. Film and Television Cinematography (3) I

Two lectures and three hours of laboratory.

Prerequisites: Television, Film, and New Media 260, 261, and 320.

Proof of completion of prerequisites required: Copy of transcript.

Advanced theory and practice of cinematography for film and television production. Practicum in cinematography problems related to control of light and image for television and film, including use of specialized equipment, film and videotape stock, location and studio shooting, and complex blocking problems.

550. Art Direction for Television and Film (3) II

One lecture and four hours of activity.

Prerequisites: Television, Film, and New Media 250, 260 or 261 or 325, and consent of instructor. **Proof of completion of prerequisites required:** Copy of transcript.

Aesthetic, technical, and administrative aspects of design for television and film. Experience in scenic design, construction, decoration, lighting, and special effects. Practical experience in University sponsored productions.

551. Production Design for Television and Film (3)

Prerequisites: Television, Film, and New Media 250 and credit or concurrent registration in Television, Film, and New Media 401.

Theory and analysis of production design concepts for television and film. Determination of stylistic and technical requirements for fictional and nonfictional productions.

560. Advanced Film and Video: Field Production (3)

One lecture and more than six hours of laboratory.

Prerequisites: Television, Film, and New Media 260, 261, and 410 with grade of B (3.0) or better in each and consent of instructor. **Proof of completion of prerequisites required:** Copy of transcript.

Practicum in direction and production of dramatic and nondramatic film and video. Cameras, lighting, design, sound techniques, experience in University sponsored productions.

561. Advanced Film and Video: Studio Production (3)

One lecture and more than six hours of laboratory.

Prerequisites: Television, Film, and New Media 260, 261, and 410 with grade of B (3.0) or better in each and consent of instructor.

Program development, presentational techniques, and individual projects in producing and directing. Practical experience in University sponsored productions. (Formerly numbered Telecommunications and Film 580A-580B and 580.)

562. Documentary and Propaganda Film/Television (3)

Prerequisite: Television, Film, and New Media 160.

Analysis through viewing of persuasive concepts, techniques, and forms in international and documentary film and television programs.

565. Animated Film Techniques (3) II

Two lectures and more than three hours of activity.

Screening of representative examples and production of a filmograph or animated motion picture. Practical experience in University sponsored productions.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

Communicative Disorders

OFFICE: Communications Clinic 118

TELEPHONE: (619) 594-6774

FAX: (619) 594-7109

WWW: rohan.sdsu.edu/dept/chhs/cd/cd.html

In the College of Health and Human Services

Accredited in speech-language pathology and audiology by the American Speech-Language-Hearing Association and in the education of the deaf by the Council on Education of the Deaf.

Faculty

Emeritus: Davies, Earnest, Kopp, Riedman, Thile

Chair: Kramer

Professors: Allen, Cheng, Christensen, Kramer, Nichols, Seitz, Thal

Associate Professors: Gutierrez-Clellen, Shapiro, Williams, Wulfeck

Assistant Professors: Barlow, Mackersie

Lecturers: Fischer, Launer, Lopes

Adjunct: Kryter, Sandlin, Singh

Offered by the Department

Doctor of Philosophy degree in language and communicative disorders.

Master of Arts degree in communicative disorders.

Major in communicative disorders with the B.A. degree in liberal arts and sciences.

Minor in communicative disorders.

Certificate in early intervention.

Certificate in professional services bilingual/multicultural.

Clinical-rehabilitative services credential.

Education specialist for the deaf and hard of hearing credential

The Major

Speech and language pathology, audiology, and education of the hearing impaired are professions which 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 Department of Communicative Disorders is committed to preparing speech-language-hearing professionals to meet the challenges of a racially, ethnically, and linguistically diverse society.

The bachelor's degree serves as the basis for graduate and professional study in communicative disorders. There are no employment opportunities for holders of the bachelor's degree. A master's degree, national certification and state licensure or school credential are needed for professional practice.

The undergraduate curriculum is broad, involving coursework on normal and disordered speech, language, and hearing, as well as clinical procedures. All communicative disorders majors cover a set of general studies in early coursework (21 units) before specialization (26 upper division units). Students interested in the communicative disorders 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 the master's degree are similar in many ways; it is the area of specialization that serves to differentiate courses of study.

The communicative disorders minor is open to all majors but is strongly recommended for those in special education or the social and

behavioral sciences who wish to broaden their competencies in a related applied discipline.

The master's degree is an advanced degree for those wishing to work professionally as a speech-language pathologist, speech and hearing scientist, audiologist and/or deaf educator.

Positions in communicative disorders are available in many public and private settings working with persons with speech, language, and hearing, 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.

Communicative Disorders Major

With the B.A. Degree in Liberal Arts and Sciences

(Major Code: 12201)

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 communicative disorders courses can apply to the degree.

A minor is not required with the major.

Preparation for the Major. Communicative Disorders 106, 110, and 205; Physics 201; Psychology 101 and 260; Psychology 270 or Sociology 201. (21 units)

Foreign Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language as part of the preparation for the major. Refer to the section of this catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 26 upper division units in communicative disorders to include Communicative Disorders 300, 320, 321, 322, 340, 340L, and Linguistics 452*, and six units of electives selected from Communicative Disorders 350, 499, 501, 505, 511, 512, 513, 517, 539, 542, 550, 570, 580, 595, and 596.

* Course is co-taught with Communicative Disorders.

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 of 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 of the official program of study. Exceptions for individual courses must be approved by the department and filed with the Office of Admissions and Records.

Communicative Disorders Minor

The minor in communicative disorders consists of 22 units in communicative disorders to include Communicative Disorders 106, 205, 320, 321, 322, 340, and one of the following: Communicative Disorders 300 or 350.

Prerequisites for the minor include Communicative Disorders 110, Physics 201, Psychology 101 and 260. (12 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.

Credentials

The Department of Communicative Disorders offers academic and practica coursework applicable to two credentials required for working in California public schools: The Clinical-Rehabilitative Services (C-RS) Credential (Credential Code: 00900) and the Education Specialist Credential for the Deaf and Hard of Hearing (Credential Code: 00461).

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 department for school practicum placement in order for the certificate to be processed in time for the placement.

Education Specialist Credential for the Deaf and Hard of Hearing (Credential Code: 00461)

The Education Specialist Credential for the Deaf and Hard-of-Hearing is required for persons wishing to prepare to be teachers of persons who are deaf or hard-of-hearing.

Admission Requirements:

1. Formal application to San Diego State University and to the Department of Communicative Disorders. Applicants at the post baccalaureate level must satisfy the admission requirements of the department for classified graduate standing with a concentration in education of the deaf.
2. American Sign Language proficiency at the intermediate level or above.
3. Interview with a faculty member in the Department of Communicative Disorders.

Program Requirements:

1. This credential requires a combination of education courses and clinical/teaching experiences in addition to the requirements specified by the department.
2. Candidates must complete 300 hours of practicum for CED national certification.
3. The following courses are required: Communicative Disorders 550, 655, 657, 668; Policy Studies in Language and Cross-Cultural Education 602, 650, 651, 652; Special Education 500, 501.

Specialization in education of learners who are deaf, hard-of-hearing, or deaf with special needs: Communicative Disorders 511, 556, 562, 658, 659, 675, 953; Directed internship: Public school; Communicative Disorders 953; Directed internship: Residential school.

Clinical or Rehabilitative Services Credential (Credential Code: 00900)

The Clinical-Rehabilitative Services Credential has three options: Language, Speech and Hearing (LSH); Audiology; and Language, Speech and Hearing including the Special Class Authorization (SCA). Students desiring to work with pupils with speech, language, and hearing impairments on an itinerant or pull-out basis must complete the Clinical-Rehabilitative Services (C-RS) Credential for Language, Speech and Hearing (LSH). Students who wish to be school audiologists must complete the Clinical-Rehabilitative Services Credential for Audiology. Students who plan to teach in the classroom under the Special Day Class Authorization must complete a program of education

courses and experiences in addition to completing the requirements for the LSH option.

A master's degree in communicative disorders is required of all candidates graduating with a C-RS credential.

Candidates for C-RS credential in Language, Speech and Hearing (LSH) or Audiology (A) 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 and/or Audiology. See sections on Certificates and Licensure.

Admission Requirements:

1. Formal application to San Diego State University and to the Department of Communicative Disorders. All applicants for the credential must satisfy the admission requirements of the university and of the department for classified graduate standing and be recommended by the department for admission to the credential program.
2. California Basic Education Skills Test (CBEST) results.
3. Interview with the coordinator of the specific credential option (Language, Speech, and Hearing; Audiology; Special Class Authorization).

Program Requirements:

The program of professional preparation for the C-RS Credential in Language and Speech or Audiology 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.

C-RS Language, Speech and Hearing

The following courses are required: Communicative Disorders 106, 110, 205, 300, 320, 321, 322, 340, 340L, 501, 505, 511, 512, 513, 517, 525, 526, 539, 541, 546, 614, 618, 521 (child screening) or 619 or 676, 601 or 654, 626 or 627, 630, 671 or 673, 675, 929 and 933A. Courses from other departments include Child and Family Development 271, 570, 697, or appropriate experience; Physics 201; Psychology 101 or Sociology 101; Psychology 230, 260; Special Education 500; and Linguistics 452.

C-RS Audiology

The following courses are required: Communicative Disorders 106, 110, 159, 205, 300, 320, 321, 322, 340, 340L, 511, 512, 513, 517, 521, 525, 541, 542, 545, 546, 550, 610, 611, 627, 630, 644, 645, 646, 647 or 658, 648, 668, 671 or 673, 696, 929 and 933 (audiology placement). Courses from other departments include Child and Family Development 271 or 697 or appropriate experience; Linguistics 452; Public Health 734; Physics 201; Psychology 101 or Sociology 101; Psychology 230, 260; and Special Education 500.

C-RS Language, Speech and Hearing including Special Class Authorization

Program Requirements:

1. A current Clinical Rehabilitative Services Credential in Language and Speech or an earlier California credential that authorizes the provision of itinerant speech-language services in public schools.

2. Verification of subject matter competence prior to advancement to fulltime daily teaching responsibilities.
3. Demonstration of knowledge of alternative methods of developing English language skills.
4. Satisfaction of the Level I core requirements for the Special Education Specialist credentials.
5. Completion of a minimum of 100 hours of teaching in a Communicatively Handicapped class.

The following courses are required: Communicative Disorders 655, 929, 933B, Special Education 501, Teacher Education 526, 536, 610A, 630, 637, 910A, 930A, 930B.

Certificates and Licensure

Preparation Leading to the Certificate of Clinical Competence from the American Speech-Language-Hearing Association

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 American Speech-Language-Hearing Association (ASHA). The certificate requires a master's degree and 75 semester units (at least 27 of the 75 semester units must be in basic science coursework, and at least 36 of the 75 semester units must be in professional coursework). At least 30 of the 36 professional coursework units must be in courses for which graduate credit was received. A minimum of 21 of the 30 units must be completed at the graduate level in the professional area for which the certificate is sought. The certificate requires 375 clock hours of supervised clinical observation (25 hours) and clinical practicum (350 hours), and at least 250 or the 350 clock hours must be in the professional area for which the certificate is sought while the applicant is engaged in graduate study. Clock hours must satisfy designated categories for age span, types of disorders, assessment and intervention. 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 the Professional Certificate from the Council on Education of the Deaf

Students may complete the academic and practica requirements leading to the Professional Certificate given by the Council on Education of the Deaf. The Professional Certificate requires a specific pattern of courses and teaching experiences. Consult an adviser in the Program for Education of the Deaf for more information.

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 communicative disorders 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). Most Licensure and ASHA Certification requirements may be fulfilled concurrently. Consult an adviser in the area in which licensure is desired for specific information.

Liability Insurance

Students enrolled in Communicative Disorders 340L, 357, 525, 526, 541, 545, 546, 556 are required to purchase professional liability insurance.

Courses

LOWER DIVISION COURSES

106. Communicative Disorders (3)

Orientation to field of speech pathology and audiology. Survey of communicative disorders, covering all areas of exceptionality, normal growth and development as it relates to speech and language. Waiver of this course is permitted only upon satisfactory passage of a competency examination.

108. Oral Communication Laboratory (1) Cr/NC

Two hours of laboratory.

Prerequisite: Consent of instructor.

Individual laboratory training on specific speech problems. Student chosen through testing by Department of Communicative Disorders.

110. Observation: Communicative Disorders (2) Cr/NC

One lecture and two hours of observation per week.

Prerequisites: Credit or concurrent registration in Communicative Disorders 106.

Observation and discussion of diagnostics and remediation of speech and language disorders in children and adults in varied off-campus settings. Observation in public schools satisfies credential and certification requirements.

159. American Sign Language I (4)

Introduction to American Sign Language syntax, semantics, and use. Development of beginning level communicative competence.

205. Introduction to Audiology (3)

Prerequisites: Credit or concurrent registration in Physics 201. Qualification on Mathematics Departmental Placement Examination, Part IA.

Introduction to profession of audiology, anatomy, and physiology of hearing mechanism, physics of sound and decibel, understanding audiogram, introduction to diagnostic audiology and aural pathologies.

259. American Sign Language II (4)

Prerequisite: Communicative Disorders 159.

Intermediate level communicative competence in American Sign Language (ASL) is developed.

289. American Sign Language III (4)

Prerequisite: Communicative Disorders 259.

Development of advanced communicative competence in American Sign Language (ASL).

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)

300. Language Structure and Processing (3)

Prerequisite: Communicative Disorders 106.

Design features of language as they relate to communication behavior. Role of language structure and processing in typical and disordered communication. (Formerly numbered Communicative Disorders 500.)

320. Phonetics (3)

Two lectures and three hours of laboratory.

Auditory, kinesthetic and visual analysis of the sounds of the English language, including regional and foreign dialect and disordered speech. Competency in I.P.A. broad transcription and introduction to narrow transcription.

321. Anatomy, Neurology, and Physiology of Speech (4)

Three lectures and three hours of laboratory.

Prerequisite: Biology 212 or Psychology 260. Recommended: Credit or concurrent registration in Communicative Disorders 106.

Anatomy and physiology of neural, respiratory, phonological, and articulatory systems related to speech.

322. Psychological Foundations of Communicative Disorders (3)

Prerequisites: Communicative Disorders 106; Psychology 101. Recommended: Credit or concurrent registration in Psychology 230.

Conceptual and theoretical bases for understanding communication as a psychological process determined by principles of learning within social contexts. Application of theories of personality, behavior and cognitive social learning to speech and language development, pathology, assessment and remediation. For students in all areas of communicative disorders.

323. Speech Science (3)

Prerequisites: Communicative Disorders 106, 321; Physics 201. Basic concepts of speech science, laboratory methods, and data concerning speech acoustics, physiological phonetics, speech production theory, and speech perception.

340. Principles of Audiology (3)

Prerequisites: Communicative Disorders 205, Physics 201, Psychology 260 and concurrent registration in Communicative Disorders 340L.

Diagnostic audiology procedures: Pure-tone testing, masking, speech recognition testing and imittance. Integration and interpretation of results from the basic audiological test battery.

340L. Techniques of Audiometry (1)

Three hours of laboratory.

Prerequisite: Credit or concurrent registration in Communicative Disorders 340.

Laboratory experience with pure-tone, speech, and imittance audiometric tests.

350. Introduction to Deaf Culture (3)

American deaf community. Focus on language, social practices, evolution of cultural identity. Practicum (with ASL interpreters if necessary) will provide students with direct interaction within deaf community.

357. Fieldwork with the Deaf (1-2) Cr/NC

Two hours of activity per unit of credit and one hour of staffing.

Prerequisite: Credit or concurrent registration in Communicative Disorders 106. Recommended: Communicative Disorders 205.

Field observation and participation under supervision in school settings with small groups of hearing impaired youngsters. Maximum credit three units.

496. Topics in Communicative Disorders (1-3)

Study of some problem in communicative disorders. 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.

499. Special Study (1-3)

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

UPPER DIVISION COURSES (Also Acceptable for Advanced Degrees)

501. Voice Disorders: Children (3)

Two lectures and three hours of laboratory.

Prerequisite: Communicative Disorders 321.

Theory and practice in the remediation of voice disorders. Laboratory involves measurements of vocal dimensions and perceptual training for diagnosis and remediation of voice disorders.

505. Remediation for Fluency Disorders in School-Aged Children (3)

Prerequisite: Communicative Disorders 322.

Theoretical and phenomenological understanding of stuttering as a communicative disorder; explanations for learning of dysfluent behaviors; applied techniques in rehabilitation for school-aged children with dysfluent speech.

511. Pediatric Aural Rehabilitation (3)

Prerequisites: Communicative Disorders 320, 323, and 340. Recommended: Communicative Disorders 300, 357, and 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.

512. Phonological Disorders and Methods (3)

Prerequisite: Communicative Disorders 320.

Theories and research in analysis and remediation of phonologically disordered systems. Emphasis on linguistics, language universals, and developmental norms.

513. Language Disorders and Methods (3)

Prerequisites: Communicative Disorders 300, 320, 321, 340, and Linguistics 452 (section co-taught with Communicative Disorders).

Language development, delay, and disorders as they relate to theory and clinical practice. Methods of assessment and intervention of language impairments and differences in hearing and deaf children.

517. Diagnostic Methods in Speech-Language Assessment (3)

Two lectures and two hours of educational activities.

Prerequisites: Credit or concurrent registration in Communicative Disorders 512 and 513.

Principles and procedures for culturally relevant assessment of communication disorders in children and adults. Ethnographic interviewing; formal, informal and unbiased testing; clinical reporting. Practice with selected methods and tools. Four to eight hours observation of diagnostic practicum required.

521. Child Screening Evaluations in Speech-Language Pathology (1)

Three hours of laboratory screening per week.

Prerequisites: Communicative Disorders 512, 513, 517, and clinic clearance. Communicative Disorders 513 is not required for audiology students.

Screening evaluations of speech and language of children.

522. Adult Screening Evaluations in Speech-Language Pathology (1) Cr/NC

Three hours of laboratory screenings per week.

Prerequisites: Communicative Disorders 517, 539, and clinic clearance.

Screening evaluations of speech and language of adults.

525. Introductory Clinical Practice (1)

Eight hours of orientation; thereafter two hours of practicum and one hour of staffing per week.

Prerequisites: Grade point average of 2.75 or better in Communicative Disorders 300, 320, 321, 340, 512, 513, 517, and Linguistics 452 (section co-taught with Communicative Disorders).

Orientation to clinic, supervised observation, and practicum with representative speech and language problems.

526. Clinical Practice in Speech-Language Pathology (1-2)

Two hours of practicum and one hour of staffing.

Prerequisite: Grade of C or better in Communicative Disorders 525.

Supervised practice with representative speech and language problems. Up to two units may be taken concurrently; maximum credit two units. Qualified transfer students must enroll in at least one unit of 526 prior to 626.

539. Neuropathologies of Speech and Language (3)

Prerequisites: Communicative Disorders 321 and Linguistics 452 (section co-taught with Communicative Disorders).

Research and theory concerning nature, etiologies, and principles of treatment of disorders of speech and language resulting from pathologies of the nervous system.

540. Hearing Conservation and Audiometry for School Nurses (3)

Prerequisite: Registered nurse.

Builds on registered nurse's knowledge of anatomy, physiology, and medical-surgical treatment of disease as it relates to auditory mechanism. Designed to give background in hearing screening (pure tone and impedance) and awareness of ramifications of hearing loss in children necessary for referral and follow-up. Fulfills three-unit requirement for the School Nurse Credential and may be used toward the six-unit State Audiometric Certificate requirement. Not open to students with credit in Communicative Disorders 205, 340, 340L.

541. Hearing Screening of Children (1) Cr/NC

Three hours of laboratory screening per week.

Prerequisites: Communicative Disorders 340 and 340L.

Field experiences in audiometric and impedance screening of children to obtain contact hours in screening required by American Speech-Language-Hearing Association, California License, and Clinical-Rehabilitative Services credential.

542. Diagnostic Audiology I (3)

Two lectures and two hours of activity.

Prerequisite: Communicative Disorders 340L.

Pure tone and speech audiometry; masking; imittance tests, reporting test results, audiometer calibration. Activity immediately following lecture, to obtain experience with audiometric and imittance test equipment.

545. Clinical Practice in Audiologic Assessment (1-3)

Two hours of evaluation and one hour of staffing.

Prerequisite: Grade of C or better in Communicative Disorders 542.

Supervised practicum with pure tone, speech, imittance, and special audiologic testing. One unit represents two hours of clinical contact and one hour of staffing per week. Maximum credit three units.

546. Clinical Practice with Aural Rehabilitation (1)

Two hours of therapy and one hour of staffing.

Prerequisites: Grade of C or better in Communicative Disorders 511 and a minimum of two units in Communicative Disorders 525, 526, and/or 545.

Supervised practicum in aural rehabilitation. One unit represents two hours of clinical contact and one hour of staffing per week.

550. Education of Deaf Children and Youth (3)

Prerequisite: Communicative Disorders 350.

Educational programs, services and resources for learners who are deaf; historical background, philosophy, sociological and psychological problems.

556. Clinical Practice with the Deaf (1)

Prerequisites: Communicative Disorders 159, 357; credit in two of the following and concurrent registration in the third: Communicative Disorders 511, 513, 562. Admission to clinical practicum includes successful completion of competency examination.

Supervised therapy with representative problems found in the hearing impaired population. Maximum one unit first semester; maximum credit two units.

562. Oral Communication for Deaf and Hard-of-Hearing Children (3)

Prerequisite: Communicative Disorders 550.

Current methods for developing oral/aural communication skills with learners who are deaf or hard-of-hearing and youth. Differential problems of acquisition of communicative competence. Assessment and intervention procedures for classroom and clinical settings.

570. Dysphagia (3)

Prerequisite: Communicative Disorders 539.

Measurement techniques and research in dysphagia. Assessment and treatment of dysphagia and swallowing problems in children and adults. (Formerly numbered Communicative Disorders 609.)

580. Communication Problems of the Aging (3)

Prerequisites: Twelve upper division units in an appropriate major.

Normal communication processes and aging, including memory and cognition for speech and language, and physiological changes; speech and language pathologies; hearing problems and rehabilitation, including hearing aids, psychosocial aspects of communication, including family dynamics; and resources available within the community. Open to majors and nonmajors.

595. Research Practicum (1-3) Cr/NC

Prerequisites: Admission to the department and approval of department chair.

Participation in a specific research activity under faculty supervision. Maximum combined credit of six units of Communicative Disorders 595 and 795.

596. Selected Topics in Communicative Disorders and Science (1-4)

Prerequisite: Twelve units in communicative disorders and science courses.

Specialized study of selected topics from the area of speech-language pathology, audiology, education of the hearing impaired, and speech and hearing science. 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. Maximum credit of three units of 596 applicable to a master's degree. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

Community Health Education

In the College of Health and Human Services

OFFICE: Hardy Tower 119
TELEPHONE: (619) 594-6317

Faculty

Emeritus: Barnes, Boskin, Burgess, Harper, Kessler, Kitzinger, McTaggart, Sorochan

Professors: Chang, Senn

Associate Professor: Noto

Lecturer: Gresham

Offered by the Graduate School of Public Health

Major in health science with the B.S. degree in applied arts and sciences.

Emphasis in community health education.

Minor in health science.

The Major

Health education is becoming increasingly accepted as an important and economical tool for promoting health behaviors among people. Despite the vast array of preventive, therapeutic, and rehabilitative facilities developed by medical science, human health continues to depend largely on translating knowledge into individual behaviors and lifestyles. Education designed to encourage appropriate health behaviors can effectively prevent much suffering and disability. The Health Science major with an emphasis in Community Health Education trains students to develop, implement and assess health education programs in a variety of settings for different target groups. The major prepares entry-level health educators for positions in government, hospitals, clinics and private/voluntary health agencies.

Preparatory coursework for this interdisciplinary major includes courses in community health education, communication, nutrition, psychology, sociology, zoology, chemistry, microbiology and mathematics. Career opportunities vary depending on funding, geographic location, population shifts, health status and disease patterns. Bilingual and bicultural skills are widely needed in the job market.

Standards for Admission

Admission to the Premajor

Declaration of the Health Science Premajor is only accepted from November 1 to November 30 each year for admission the following fall semester. No applications are accepted for Spring semester.

Admission to the Major

There are additional requirements for advancement to the major.

1. A grade of "B" or better in Community Health Education 290 and Community Health Education 292.
2. Satisfactory completion of lower division writing and mathematics competency examinations.
3. Overall GPA of 2.50 or better in all classes.
4. Submission of a written statement outlining the student's career goals and motivation for entering the health field.

A point system is used for ranking and evaluating prospective applicants. Fulfillment of the requirements does not automatically secure admission to the major, as only a limited number of applicants can be accepted each Fall semester. Premajors are notified in January (after completing Community Health Education 290 and 292) of their acceptance or rejection.

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.

Impacted Program. The health science major is designated as an impacted program and specific regulations related to admissions are imposed. Consult the department for regulations and admissions criteria.

Emphasis in Community Health Education

Preparation for the Major. Community Health Education 101, 290, 292; Biology 210*, 212; Chemistry 100 (or Chemistry 130 for students with previous work in chemistry); Communication 103; Nutrition 107; Psychology 101, 270, 271; Sociology 101. (36-37 units)

Upper Division Writing Requirement. Passing the University Writing Examination or Rhetoric and Writing Studies 305W or 503W with a grade of C (2.0) or better.

Major. A minimum of 39 upper division units to include Community Health Education 401, 402, 406, 490, 497 (six units), 560; Biology 336; Educational Technology 532; and twelve units of electives in community health education (Social Work 350 may be substituted for one of the electives).

* Prerequisites waived for students in this major.

Health Science Minor

The minor in health science consists of a minimum of 15 units, 12 of which must be upper division, selected from Community Health Education 101, 290, 401*, 470, 560, 561.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

* Additional prerequisites required.

Courses

LOWER DIVISION COURSES

101. Health and Life Style (3) I, II

Major variables in human health experience with attention to personal health assessment and application of health knowledge to health behavior. Not open to students with credit in Community Health Education 301.

290. Health Education as a Profession (3) I

Prerequisites: Declared pre-health science majors and minors only and Community Health Education 101 or 301.

Health education and its role in the health system. For students with professional interests in health education.

292. Community Health (3) I

Prerequisite: Declared pre-health science majors only.

Community health problems; role of the citizen, the public, and community health agencies in promoting and protecting the health of the community.

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)**

301. Concepts of Health Education (3) II

Development and application of concepts in individual, family, community health and behavior change. Not open to students with credit in Community Health Education 101.

**320. Health Education for Teachers (3) II
(Offered only in Extension and IVC)**

Required for professional clear multiple or single subject credential teaching applicants. Covers all topics designated in California framework including nutrition, substance abuse, CPR, and child abuse.

331. Crisis Management (3) II

Physical and psychological crisis situations, various procedures and techniques in immediate management and follow-up referrals.

345. Safety and Accident Prevention (3)

Prerequisite: Community Health Education 292.

Causes and incidence of accidents with emphasis on role of education, prevention, and injury control.

350. Environmental Health Education (3)

Environmental hazards of living and working in this modern technological world, including air, noise, land, food, and water pollution.

353. Sexually Transmitted Diseases (3)

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

Evolution and occurrence of sexually transmitted diseases worldwide, focusing on biological, medical, psychological, sociocultural, and political factors.

362. International Health (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations 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.

401. Change Process in the Community (3) I, II

Prerequisites: Community Health Education 290, Psychology 101, Sociology 101, and declared health science majors or minors. Grade of B or better in Community Health Education 290.

Attitude formation, behavior change, decision making, perception, motivation, group behavior, etc., and their relationship to practice of health and human services.

402. Communications in Health Education (3) I, II

Prerequisites: Community Health Education 290, 292, Communication 103, and completion of Upper Division Writing Requirement. Grade of B or better in Community Health Education 290 and 292.

Development and production of health presentations for group and individual levels; including written, oral, and graphic methods.

406. Health Education Methodology (3) I, II

Prerequisite: Community Health Education 401.

Strategies, techniques, and materials for planning and conducting health education. Applications of learning theory in the development and use of educational methodologies in health education.

470. Communicable and Noncommunicable Diseases (3) I, II

Causes, prevention and control of communicable, degenerative and chronic health disorders.

475. Human Sexuality (3)

Examination of the development of sexual values, attitudes, and behavior from infancy to old age.

490. Measurement and Evaluation in Health Education (3) I, II

Prerequisites: Psychology 270, 271; satisfactory completion of the Entry-Level Mathematics requirement and the SDSU Mathematics Competency requirement. **Proof of completion of prerequisites required:** Copy of ELM or placement scores or verification of exemption; proof of Cr in General Mathematics Studies 90A or 90B or notification from General Mathematics Studies; copy of transcript.

Measurement in health education; data gathering techniques; organization; presentation and interpretation of data; computer utilization; basic principles of health education programs.

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.

497. Supervised Field Experience (1-6) Cr/NC I, II

Prerequisites: Senior standing in Community Health Education emphasis; Community Health Education 401, 402, and 406.

Supervised practical experience in local health agencies and/or schools. Maximum credit six units.

499. Special Study (1-3) I, II, S

Prerequisite: Consent of special study adviser.

Individual study. Maximum credit six units.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

560. Introduction to Public Health (3) I, II

Prerequisite: Community Health Education 290.

Epidemiological methods, behavioral and biological determinants, modes of transmission, risk factors, prevention of common infectious and chronic disease. Evaluation of health information to develop health education programs.

561. Health and Medical Care (3) II

Prerequisite: Senior or graduate standing with a major or minor in health education or a closely related area.

Health values, concepts, and attitudes; health products and facilities; hospital care and hospitalization plans; governmental health controls; economic and cultural influences on health and medical care; professional contributions, relationships, and careers; national and international health programs.

574. Habit-Forming Substances (3) I

Tobacco, alcohol, and other drugs; their use, misuse and abuse.

596. Workshop in Health Education (1-3)

Selected problems in health science are used as a basis for workshop experiences. 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; maximum credit of three units of 596 applicable to a master's degree. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

**GRADUATE COURSES
Refer to Bulletin of the Graduate Division.**

Comparative Literature

In the College of Arts and Letters

OFFICE: Adams Humanities 4158

TELEPHONE: (619) 594-5327

FAX: (619) 594-4998

WWW: <http://www-rohan.sdsu.edu/dept/english/engl.html>

Faculty

Faculty assigned to teach courses in comparative literature are drawn from departments in the College of Arts and Letters.

Offered by the Department of English and Comparative Literature

Major in comparative literature with the B.A. degree in liberal arts and sciences.

Teaching major in comparative literature for single subject teaching credential in English.

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, Japanese literature and film, and rock poetry. 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. Graduate study in comparative literature may lead to teaching at more advanced levels. The Plan II major has been specifically designed for students who plan to do graduate work in this area.

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.

Comparative Literature Major

**With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 15031)**

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 210, 270A, 270B. (9 units)

Foreign Language Requirement. Plan I: 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 section of catalog on "Graduation Requirements."

Plan II: See below.

Upper Division Writing Requirement. Passing the University Writing Examination or English 508W, 581W, 584W or Rhetoric and Writing Studies 500W with a grade of C (2.0) or better.

Major. Plan I: General literature. For students who do not intend to enter a graduate program in comparative literature.

Required: A minimum of 33 upper division units to include 18 units in one of the three areas (A, B, and C) below; nine units in American literature, British literature, or creative writing; and an additional six units in comparative literature.

Plan II: For students who intend to enter a graduate program in comparative literature.

Required: A minimum of 30 upper division units to include 18 units in one of the three areas (A, B, and C) below; six units in a foreign language literature (read in the original language); and six units in another literature (which may be English or American) read in the original language. It is strongly recommended that even those students choosing English or American as their second literature attain competency in a second foreign language.

A. European Literature. Eighteen units selected from the following:

1. Comparative Literature 511, 512, 513, 514.
2. Up to six units in other, variable-content comparative literature courses with appropriate content approved by the departmental adviser.
3. Up to six units from Art 371, 557, 558, 559, 573A, 573B, 574, 575; Classics 310, 320, 330; History 407A, 407B, 440, 503A, 503B, 506, 507, 509, 510, 511A, 511B, 512A, 512B, 526, 528; Humanities 401, 402, 403, 404; Music 351A, 351B, 351C; Philosophy 412, 413, 414, 506, 508; Political Science 301A, 301B, 302; and Religious Studies 318.

B. Asian, African, and Latin American Literature. Eighteen units selected from the following:

1. Comparative Literature 440, 445, 455, 460, 530.
2. Up to six units in other, variable-content comparative literature courses with appropriate content approved by the departmental adviser.
3. Up to six units from Anthropology 442, 449; Art 562; Asian Studies 458, 459, 596 (with appropriate content approved by the

departmental adviser); History 415A, 415B, 420, 421, 473A, 473B, 475A, 475B, 555, 556, 557, 558, 561, 565; Humanities 450, 460; Music 351E; and Religious Studies 340, 401, 403.

C. Comparative Literary Theory (Theory of literature, genre study, literature in relation to other arts and disciplines).

Eighteen units selected from the following:

1. Comparative Literature 561, 562, 563, 580, 594, 595.
2. Up to six units in other, variable-content comparative literature courses with appropriate content approved by the departmental adviser.
3. Up to six units from English 493, 570, 571, 573; Music 592; Philosophy 334, 541, 542; Religious Studies 360; Theatre 460A, 460B; and Women's Studies 352, 553.

Comparative Literature Major

In preparation for the Single Subject Teaching Credential in English

With the B.A. Degree in Liberal Arts and Sciences

(Major Code: 15031)

Preparation for the Major. Comparative Literature 210, 270A, 270B; Linguistics 101; Rhetoric and Writing Studies 100, 200; Humanities 140 or Theatre 120; English 280 or 281; English 250A-250B or 260A-260B; Communication 200 or Journalism 220 or Theatre 115. (33 units)

Foreign 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 section of this catalog on "Graduation Requirements."

Upper Division Writing Requirement. English 508W or Rhetoric and Writing Studies 500W with a grade of C (2.0) or better.

Major. A minimum of 42 upper division units to include Comparative Literature 561 or 562 or 563; English 533; Linguistics 420 or 530; Rhetoric and Writing Studies 509; Theatre 310 or 480. English 560A-560B (for those who took English 250A-250B) or six units selected from English 522, 523, 524, 525 (for those who took English 260A-260B).

Three units in ethnic literature selected from Africana Studies 460, 461, 462, 463, 464; American Indian Studies 430; Chicana and Chicano Studies 335, 464; English 519, 520.

Three units selected from Communication 360*, 371, 391, 407*, 408, 491*; Linguistics 410, 520, 524, 550*, 551.

Twelve units selected from Comparative Literature major, Plan II, Options A, B, or C; and three additional Comparative Literature elective units.

* Additional prerequisites required.

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: Comparative Literature 511, 512, 513, 514.

Asian, African, and Latin American Literature: Comparative Literature 440, 445, 455, 460, 530.

Comparative Literary Theory (Theory of literature, genre study, literature in relation to other arts and disciplines): Comparative Literature 561, 562, 563, 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 490, 571, 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

LOWER DIVISION COURSES

210. Introduction to Comparative Literature (3) Cr/NC

Introductory study of comparative literature, its current status, its historical development, range of comparative approaches. Generally includes guest presentations by various members of the comparative literature faculty

270A-270B. World Literature (3-3) I, II

Comparative study of selected major works from various continents and cultures, with emphasis on the 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.

296. Topics in Comparative Literature (3)

An introduction to the subject matter of comparative studies in literature. Focus on a specific movement, theme, figure, genre, etc. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

UPPER DIVISION COURSES (Intended for Undergraduates)

405. The Bible as Literature (3) I, II

Same course as English 405.

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

Prose and poetry of the King James version.

440. African Literature (3)

Prerequisite: Completion of the General Education requirement in Foundations 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.

445. Modern Latin American Literature (3)

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

Reading selections from major Latin American authors.

455. Classical Asian Literature (3)

Prerequisites: Comparative Literature 270A or 270B or English 220; and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

Survey of one or more Asian literatures from the classical period of China, Japan, India, Korea, and others.

460. Modern Asian Literature (3)

Prerequisites: Comparative Literature 270A or 270B or English 220; and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

Survey of one or more Asian literatures from the modern period of China, Japan, India, Korea, the Philippines, Vietnam, and others.

470. Folk Literature (3)

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

Studies in the ballad, bardic poetry, oral and popular literature and folklore.

490. Literary Movements (3)

A movement or theme in world literature—such as symbolism, existentialism, revolution, or romantic love. See Class Schedule for specific content.

Comparative Literature

499. Special Study (1-3) Cr/NC I, II

Prerequisites: Consent of instructor and approval of department chair.

Individual study. Maximum credit six units.

UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)

Prerequisite for all 500-level courses: Six units in literature or three units in literature and three units in a related area appropriate to the course in question.

511. Continental Renaissance (3)

Representative selections from authors of the Renaissance period in continental Europe.

512. Seventeenth and Eighteenth Century European Literature (3)

Selected works by European writers prior to 1800.

513. Nineteenth Century European Literature (3)

Selected works by European writers between 1800 and 1900.

514. Modern European Literature (3)

Selected works by European writers of the twentieth century.

530. Topics in Asian Literature (3)

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.

561. Fiction (3)

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.

562. Drama (3)

Forms and themes in drama. 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.

563. Poetry (3)

A comparative approach to themes and forms in poetry. 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.

571. Literary Use of Legend (3)

Literary treatment of such legendary figures as Don Juan, Faust, and Ulysses, in a wide range of literature and genres. See Class Schedule for specific content.

577. Major Individual Authors (3)

In-depth study of the works of a major author, such as Dante, Murasaki, or Dostoyevsky. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

580. Concepts in Comparative Studies (3)

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.

594. Topics in Literature and the Arts (3)

Prerequisite: 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.

595. Literature and Aesthetics (3)

Prerequisite: 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.

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.

Computer Engineering

In the College of Engineering

OFFICE: Engineering 426
TELEPHONE: (619) 594-5718

Faculty

Chair: Szeto
Coordinator for Computer Engineering: Marino
Professors: Harris, F., Harris, J., Iosupovici, Marino, Panos
Associate Professor: Ozturk
Assistant Professor: Park

Offered by the Department of Electrical and Computer Engineering

Major in computer 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 Accreditation Board for Engineering and Technology, Inc., 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.

I. Communication and Critical Thinking: 9 units

1. Oral Communication (3 units)
2. Composition (3 units)
3. Intermediate Composition and Critical Thinking (3 units)

II. Foundations: 29 units

A. Natural Sciences and Quantitative Reasoning (17 units):

1. Physical Sciences (11 units)
Chemistry 105 (4 units)
Physics 195 (3 units)
Physics 196 and 196L (4 units)
2. Life Sciences (3 units)
3. Laboratory (satisfied under A.1. above)
4. Mathematics/Quantitative Reasoning
Mathematics 150 (3 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 in General Education, excluding courses numbered 500 and above.

IV. Explorations: 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.
- B. Upper division Humanities (3 units from a department not selected in A above.)
- C. Upper division Social and Behavioral Sciences (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 players, tape 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 equally 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. Some of the most important areas include: Very Large Scale Integrated Circuits design (i.e., the design of electronic circuits implemented on tiny 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), which is a new technique for designing more reliable and maintainable software.

The department and its faculty seek to provide students in computer engineering with an educational experience that is balanced between theory and current practice and between classroom instruction and project activities. To reinforce and integrate the fundamentals learned in the earlier courses, the program culminates in a two semester team senior design project or in a capstone design course in a particular subject area.

Computer Engineering Major

With the B.S. Degree (Major Code: 09094)

The program below describes the 128 units required for the degree.

Preparation for the Major. Computer Engineering 160, 260, 270, 271; Chemistry 105; Electrical Engineering 210; Engineering 280; Mathematics 150, 151, 252; Physics 195, 196, 196L; and one elective selected from Physics 197 or Mathematics 245. (45 units)

General Education. Engineering students must follow the specific General Education program outlined on this page. Other General Education requirements and limitations, as well as listings of specific General Education course electives are presented in Section IX of Graduation Requirements for the Bachelor's Degree. (Fifty units, including 14 units from preparation for the major which count toward General Education credit, and 3 units of American institutions which

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Units</i>	<i>Spring Semester</i>	<i>Units</i>
Chem. 105, Prep. for General Chem. 4 (Chem. 200 is also acceptable)		CompE 160, Computer Prog. with C 3	
Math. 150, Calculus I 5		Math. 151, Calculus II 4	
Phys. 195, Principles of Physics 3		Phys. 196, 196L Principles of Physics 4	
General Education* 6		General Education* 6	
	18		17

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Units</i>	<i>Spring Semester</i>	<i>Units</i>
EE 210, Electrical Network Anal. I 3		CompE 271, Computer Organization 3	
Math. 252, Calculus III 4		Engr. 280, Methods of Analysis 3	
CompE 260, Data Structures and Object-Oriented Programming 3		Math. 245, Discrete Mathematics or Phys. 197, Principles of Physics 3	
CompE 270, Digital Systems 3		American Institutions 3	
General Education* 3		General Education* 3	
	16		15

JUNIOR YEAR

<i>Fall Semester</i>	<i>Units</i>	<i>Spring Semester</i>	<i>Units</i>
EE 300, Comp. and Stat. Methods 3		CompE 360, Software Design & Engr. 3	
EE 310, Electrical Network Anal. II 3		CompE 361, Windows Programming 3	
EE 330, 330L, Fund. Engr. Electronics 4		CompE 470, 470L, Digital Circuits 4	
CompE 375, Embedded Systems Prog. 3		EE 410, Signals and Systems 3	
General Education* 3		General Education* 3	
	16		16

SENIOR YEAR

<i>Fall Semester</i>	<i>Units</i>	<i>Spring Semester</i>	<i>Units</i>
CompE 475, Microprocessors 3		Technical Electives+ 9	
Technical Electives+ 9		General Education* 6	
General Education* 3			
	15		15

* See previous page for specific requirements.
 + Check with department for recommended courses.

count toward General Education credit.)

American Institutions. This requirement is described in Section IV of Graduation Requirements for the Bachelor's Degree. Engineering students should pay close attention to the community college transfer credit option in IV.B that can satisfy the American Institutions General Education requirement with a single three-unit course.

Upper Division Writing Requirement. Each student must pass the University Writing Examination or complete one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 47 upper division units to include Computer Engineering 360, 361, 375, 470, 470L, 475; Electrical Engineering 300, 310, 330, 330L, 410; three courses selected from Computer Engineering 490A-490B, 560, 572, 577, Electrical Engineering 556; nine units of approved technical electives in computer engineering, computer science, or electrical engineering. 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.

Elective courses are subject to the approval of the faculty adviser and the department chair. The student must file an approved Master Plan during the first semester of the junior year specifying the electives selected. Changes in the Master Plan are permitted at any time, with approval of the department chair.

Courses

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.

All listed prerequisite courses for Computer Engineering and Electrical Engineering courses must be satisfied with a grade of C- or better.

LOWER DIVISION COURSES

160. Computer Programming with C (3) I, II

Two lectures and three hours of laboratory.

Prerequisite: Credit or concurrent registration in Mathematics 150.

Use of editors, compilers, and operating system services for file management and program development. Fundamentals of the C programming language. Problem solving with computers. Principles of program design and development. (Formerly numbered Electrical Engineering 160.)

260. Data Structures and Object-Oriented Programming (3)

Prerequisite: Computer Engineering 160.

C++ language: Classes, dynamic memory allocation, operator overloading, abstract data types, inheritance, polymorphism. Object-oriented design and programming. Data structures and algorithms: Stacks, lists, trees, searching, and sorting.

270. Digital Systems (3) I, II

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. (Formerly numbered Electrical Engineering 270.)

271. Computer Organization (3) I, II

Prerequisites: Computer Engineering 160 and 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. (Formerly numbered Electrical Engineering 371.)

290. C/C++ as a Second Language (1) Cr/NC

Prerequisite: Equivalent of two programming courses in language(s) other than C/C++.

Fundamentals of C and C++ for programmers who are new to C. C and C++ data types, selection, iteration, functions, pointers, arrays, and input/output. Classes, overloading, inheritance, and abstract data types in C++. Intended primarily as a bridge course for transfer students.

**UPPER DIVISION COURSES
(Intended for Undergraduates)**

360. Software Design and Engineering (3)

Prerequisites: Computer Engineering 260 and 271.

Object-oriented design and programming: Classes, methods messages, inheritance, polymorphism. Data structures and algorithms using C++: Strings, lists, stacks, queues, trees, searching, sorting, hash tables, container classes. Software engineering: Life-cycle models, testing, development phases.

361. Windows Programming (3)

Two lectures and three hours of laboratory.

Prerequisites: Computer Engineering 260 and 271.

Graphical user interface programming: Dialog boxes, menus, toolbars, status bars, fonts, icons, bitmaps. Event-driven programming: Processes, events message processing, timers, on-idle processing, multithreaded programming. C++ windows class libraries: Integrated development environments, application framework, document view architecture. Visual programming.

375. Embedded Systems Programming (3)

Two lectures and three hours of laboratory.

Prerequisite: 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. (Formerly numbered Electrical Engineering 375.)

470. Digital Circuits (3) I

Prerequisite: Computer Engineering 270.

Design of digital electronic systems using commercially available high-speed digital devices and circuits. (Formerly numbered Electrical Engineering 470.)

470L. Digital Logic Laboratory (1) I, II

Three hours of laboratory.

Prerequisites: Electrical Engineering 330L and credit or concurrent registration in Computer Engineering 470.

Hands-on experience in characterization and application of standard digital integrated circuit devices. (Formerly numbered Electrical Engineering 470L.)

475. Microprocessors (3) II

Prerequisites: Computer Engineering 271 and 470.

Bus design, memory design, interrupt structure, and input/output for microprocessor-based systems. (Formerly numbered Electrical Engineering 475.)

490A-490B. Senior Project (490A: 1 unit, SP) (490B: 2 units)

Computer Engineering 490A: Three hours of activity. Computer Engineering 490B: Six hours of activity.

Prerequisite: Completion of three of the following courses with a grade of C or better in each: Computer Engineering 375, 475, 560, 572, 577, Electrical Engineering 556.

Supervised team design projects. Each team completes a single design project in the two-semester sequence. Written and oral reports.

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.

499. Special Study (1-3) I, II

Prerequisite: Approval of project adviser and department chair.

Individual study. Maximum credit six units.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

560. Computer and Data Networks (3)

Two lectures and three hours of laboratory.

Prerequisites: Computer Engineering 271 and Electrical Engineering 410.

Wide area and local area networks. Multi-layered protocol models, telephone systems, modems, and network applications. (Formerly numbered Electrical Engineering 560.)

572. VLSI Circuit Design (3) I

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. (Formerly numbered Electrical Engineering 572.)

577. Multimedia Systems Programming (2)

Prerequisites: Computer Engineering 361 and concurrent registration in Computer Engineering 577L.

C++ language: classes, overloading, inheritance, polymorphism. Graphical user interface and event-driven programming. Foundations classes and application framework. Document-view architecture. Audio and video programming. Team projects. (Formerly numbered Electrical Engineering 577.)

577L. Multimedia Systems Programming Laboratory (1)

Prerequisites: Computer Engineering 271 and concurrent registration in Computer Engineering 577.

Laboratory to accompany Computer Engineering 577; see course description for Computer Engineering 577. (Formerly numbered Electrical Engineering 577L.)

596. Advanced Computer Engineering Topics (1-3) I, II

Prerequisite: Consent of instructor.

Modern developments in computer engineering. 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. Maximum combined credit of six units of Computer Engineering 596 and 696 applicable to a 30-unit master's degree.

Computer Science

In the College of Sciences
Mathematics 203

OFFICE: Business Administration/

TELEPHONE: (619) 594-6191

The B.S. degree in Computer Science is accredited by the Computer Science Accreditation Commission of the Computing Sciences Accreditation Board.

Faculty

Chair: Elwin
Coordinator for Computer Science: Beck
Professors: Anantha, Baase-Mayers, Beck, Carroll, Donald, Marovac, Swiniarski, Tarokh, Vuskovic
Associate Professors: Eckberg, Stewart, Vinge, Whitney
Adjunct: Root

Offered by the Department of Mathematical and Computer Sciences

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.

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.

Computer Science Major

With the B.S. Degree in Applied Arts and Sciences
(Major Code: 07011)

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; Physics 195, 195L, 196, 196L, or Chemistry 200, 201, or Biology 201, 202; and two additional science courses selected with approval of a computer science adviser. These should be courses for sciences or engineering majors or have a strong emphasis on quantitative methods. (41-43 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

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 550 or 551A; and 12 units of electives selected with the approval of a computer science major adviser. The student must complete an outline for the major and file a copy signed by a major adviser with the Office of Admissions and Records.

Computer Science Minor

The minor in computer science consists of a minimum of 18-24 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 121 and 122, or 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*

The purpose of the program is to prepare students to acquire, manage, and visualize 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, 220, 310, 320, 503, 514, 520, 535, 551, 575 and 12-15 units selected from Geography 381, 484, 488, 582, 584, 585, 588. Courses with relevant content 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.

* Additional prerequisites required for this certificate.

Courses

LOWER DIVISION COURSES

106. Introduction to Computer Programming with FORTRAN (3) I, II (CAN CSCI 4)

Prerequisite: Satisfaction of the Entry-Level Mathematics requirement.

Introduction to problem solving on a computer, design of algorithms, and use of FORTRAN language. Extensive programming.

107. Introduction to Computer Programming (3) I, II, S

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.

108. Intermediate Computer Programming (3) I, II, S

Prerequisites: Qualification on the Mathematics Departmental Placement Examination, Part IA; and Computer Science 107.

Further training in program design and development. Introduction to data structures: stacks, queues, linear lists, trees, sets. Pointers and recursion. Implementation and analysis of sorting and searching algorithms. Extensive programming.

205. Introduction to Computational Programming and Visualization (3)

Prerequisite: First semester calculus (either Mathematics 120 or 121 or 150).

Problem solving skills for needs of science. Use of computing and software tools of computational science introduced to gain competence in computer communications, programming and visualization. Supervised computer laboratory.

220. UNIX and the C Programming Language (3) I, II

Prerequisite: Computer Science 108.

Introduction to the UNIX operating system: shell programming, major system services and utilities. The C language: its features and their significance in the UNIX programming environment.

237. Machine Organization and Assembly Language (3) I, II

Prerequisite: Computer Science 108.

General concept of machine and assembly language, including data representation, looping and addressing techniques, subroutine linkage, macros, interrupts, and traps.

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.

299. Special Study (1-3)

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

**UPPER DIVISION COURSES
(Intended for Undergraduates)**

310. Data Structures (3) I, II, S

Prerequisites: Computer Science 108 and Mathematics 245.

Representation of and operations on basic data structures. Arrays, linked lists, stacks, queues, orthogonal lists, trees; recursion; hash tables; dynamic storage management and garbage collection.

320. Programming Languages (3) I, II

Prerequisite: Computer Science 108.

Principles of high-level programming languages, including formal techniques for syntax specification and implementation issues. Language concepts studied through at least two imperative languages (one static and one block structured) and at least one applicative language.

370. Computer Architecture (3) I, II

Prerequisite: Computer Science 237.

Communication between the components of a computer. Microprogramming. Programming with coroutines, traps, and interrupts. Characteristics of I/O devices and media. I/O programming.

420. Ada and Programming Methodologies (3)

Prerequisite: Computer Science 310.

Introduction to programming in Ada. Advanced concepts and features present in a variety of modern programming languages and programming methodologies as applied in Ada.

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.

470. UNIX System Administration (3)

Prerequisite: Computer Science 220.

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.

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.

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.

498. Directed Readings in Computer Science Literature (1)

Prerequisite: Credit or concurrent registration in the upper division computer science course in which readings are to be undertaken.

Individually directed readings in computer science literature. May be repeated for a maximum of three units, taken each time from a different instructor.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

UPPER DIVISION COURSES (Also Acceptable for Advanced Degrees)

501. Language Studies (1-3)

Prerequisites: Computer Science 108 and 310.

Syntax and semantics of a high level programming language. Concepts and issues in effectively applying the language. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units. Not applicable to the computer science degree.

503. Scientific Database Techniques (3)

Prerequisites: Computer Science 205, 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. Not applicable to the computer science degree.

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.

520. Advanced Programming Languages (3)

Prerequisites: Computer Science 237, 310, and 320.

Object oriented programming, concurrent programming, logic programming. Implementation issues.

524. Compiler Construction (3)

Prerequisites: Computer Science 237, 310, and 320.

Syntactical specification of languages. Scanners and parsers. Precedence grammars. Run-time storage organization. Code generation and optimization.

530. Systems Programming (3) I, II

Prerequisites: Computer Science 237 and 310.

Design and implementation of systems software. Relationship between software design and machine architecture. Topics from assemblers, loaders and linkers, macro processors, compilers, debuggers, editors. Introduction to software engineering. Large project required. Not acceptable for the M.S. degree in computer science.

532. Software Engineering (3)

Prerequisites: Computer Science 310 and 320.

Theory and methodology of programming complex computer software. Analysis, design, and implementation of programs. Team projects required.

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. Object-oriented design methodology.

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.

551. User Interface Environments (3)

Prerequisites: Computer Science 310 and 320.

Design of user-machine interfaces in interactive systems. Problems faced by user of an interactive system; basic issues and principles involved in design and implementation of good and friendly user-machine graphical interfaces.

553. Neural Networks (3)

Prerequisites: Computer Science 320 and Mathematics 254.

Principles of neural networks, their theory and applications.

555. Raster Computer Graphics (3)

Prerequisite: Computer Science 551.

Bit map graphics, algorithms to connect between different formats and enhancement of pictures.

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. Algebraic methods for spatial description of solid objects, manipulator kinematics and control. Robot programming languages and robot programming systems.

557. Computer Control Systems (3)

Prerequisites: Computer Science 310 and Mathematics 254.

Analysis and programming of real-time computer control systems, implementation of digital controllers including programming, intelligent control systems and fuzzy control.

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.

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.

560. Algorithms and Their Analysis (3) I, II

Prerequisites: Computer Science 310 and Mathematics 245.

Algorithms for solving frequently occurring problems. Analysis techniques, lower bounds. Sorting, merging, graph problems (shortest paths, depth-first and breadth-first search), and others. NP-complete problems. Not acceptable for the M.S. degree in Computer Science.

561. Multimedia Systems (3)

Prerequisite: Computer Science 551.

System aspects of multimedia authoring, browsing, and database subsystem; digital representation for different media; audio and video; operating system support for continuous media applications; architectures; design and implementation of multimedia support systems; use of multimedia technology in software engineering.

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.

564. Introduction to Computability (3)

Prerequisite: Mathematics 245 or 523.

Definition of algorithm by abstract (Turing) machines. Universal Turing machines. Primitive recursive and recursive functions. The equivalence of the computational power of Turing machines and recursive functions. Limitations and capabilities of computing machines; the halting problem.

566. Queuing Theory (3)

Prerequisites: Computer Science 108 and Statistics 550.

Performance prediction of computer networks and other systems (e.g., inventory control, customer service lines) via queuing theory techniques. Operational analysis.

570. Operating Systems (3) I, II

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.

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.

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.

575. Supercomputing for the Sciences (3)

Prerequisite: Extensive programming background in Fortran or C.

Interdisciplinary course, intended for all science and engineering majors. Advanced computing techniques developed for supercomputers. Overview of architecture, software tools, scientific computing and communications. Hands-on experience with CRAY.

576. Computer Networks and Distributed Systems (3)

Prerequisite: Credit or concurrent registration in Computer Science 570.

Local area networks and wide area networks; mechanisms for interprocess communication; rules for distribution of data and program functions.

580. Client-Server Programming (3)

Prerequisites: Computer Science 570 and knowledge of an object-oriented programming language. Recommended: Computer Science 576.

Client-server model, networking protocols for client-server programs, algorithmic issues in client-server programs, client-server protocols, implementing client-server applications.

596. Advanced Topics in Computer Science (1-4) I, II

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. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

For additional courses useful to computer scientists, see:

- | | |
|------------------|---|
| Mathematics 541. | Introduction to Numerical Analysis and Computing |
| Mathematics 542. | Introduction to Numerical Solutions of Differential Equations |
| Mathematics 561. | Applied Graph Theory |

Counseling and School Psychology

In the College of Education

OFFICE: North Education 179

TELEPHONE: (619) 594-6109

FAX: (619) 594-7025

Accredited by the California Commission on Teacher Credentialing and the National Association of School Psychologists.

Faculty

Emeritus: Carnevale, Hawley, Howard, Malcolm, Manjos, Miller, Ramage

Chair: Cummins

Professors: Cook-Morales, Cummins, Feinberg,

Robinson-Zañartu, Senour

Associate Professors: Ingraham, Terry-Guyer, Thompson

Assistant Professors: Guanipa, Loewy, Ortiz

Offered by the Department

Master of Arts degree in education with a concentration in counseling.

Master of Science degree in counseling with specializations in:

Marriage, family and child counseling;

School counseling;

School psychology.

Pupil personnel:

School counseling credential.

School psychology credential.

Courses

UPPER DIVISION COURSES (Intended for Undergraduates)

310. Group Leadership in Educational Settings (3)

Two lectures and two hours of activity.

Prerequisites: Anthropology 102 or Psychology 101 or Sociology 101; and completion of 60 units.

Identifying, classifying, and analyzing the components essential to development of leadership in educational settings. Simulation activities assist students in acquisition of group leadership skills.

400. Counseling and the Helping Professions (3) I, II

Serves as an introduction to the field of counseling and introduces the student to those professions considered to be helping professions.

401. Theories and Processes of Personal Integration (3) I, II

Perspectives of and strategies for developing and maintaining a functional balance among intellectual, physical, emotional, and interpersonal aspects of daily living.

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.

**“All the flowers of all the
tomorrows are in the
seeds of today.”**

— Chinese Proverb

499. Special Study (1-3) I, II

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)

585A. Human Sexuality for Counselors (3)

Prerequisite: Upper division course in human sexuality.

Dimensions of human sexuality that bear directly on role and function of helping professions. Human sexual development, sexual variations, sexual dysfunctions, intimate lifestyles, treatment modalities and sexual ethics. Fulfills MFCC licensure requirement.

585B. Dynamics of Adjustment Behavior (3)

Prerequisite: Upper division course in abnormal psychology.

Philosophies and dynamics of adjustment behavior, patterns and types of abnormal behavior, and treatment modalities. Fulfills MFCC licensure requirement.

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. Maximum credit of six units of 596 applicable to a master's degree. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES Refer to Bulletin of the Graduate Division.

Criminal Justice Administration

OFFICE: Professional Studies and Fine Arts 105
TELEPHONE: (619) 594-6224
FAX: (619) 594-1165

In the College of Professional Studies and Fine Arts

Faculty

Emeritus: Boostrom
Director: Rea
Professors: Gitchoff, Henderson, Sutton
Associate Professor: Sabath
Assistant Professor: Pearl

Offered by the School of Public Administration and Urban Studies

Major in criminal justice administration with the B.S. degree in applied arts and sciences.

The Major

The purpose of the criminal justice administration program is to provide current and future decision-makers in criminal justice with the foundation for critical and balanced as well as responsible and effective administrative responses. As the systems designed to deliver justice services are continually asked to accomplish more with fewer resources, the need for able and professional administrators becomes more and more pressing. The mission of the department is to provide graduates with the background and ability to meet this challenge.

Criminal justice administration majors with the B.S. degree have typically found employment at entry-level positions in local, state, and federal criminal justice agencies or in private business or security positions (e.g., loss prevention officer). 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, CIA, and Department of Agriculture.

A significant number of graduates of this degree program also enter law school after graduation.

Criminal Justice Administration Major

With the B.S. Degree in Applied Arts and Sciences
(Premajor Code: 21050) (Major Code: 21051)

Applications will be accepted only during the months of August for the following spring semester and November for the fall semester. Change of major and declaration of major will be accepted only during specific filing periods. Please contact the School for deadlines.

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.

Preparation for the Major. Criminal Justice Administration 200, Political Science 102, Sociology 101 and 150, and a three-unit course in elementary statistics (e.g., Sociology 201, Psychology 270, Statistics 250). (15 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units to include Public Administration 301; Criminal Justice Administration 301, 497 or 498, 540; six units (in addition to Public Administration 301) selected from all upper division Public Administration courses; and 18 additional upper division units selected with the approval of a department adviser. Within this program students may focus their study in areas such as law, law enforcement administration, court administration, correctional administration, juvenile justice administration, and deviance and social control. Interested students must seek guidance from a faculty adviser (may be any of the full-time faculty listed above) in selecting appropriate courses. A master plan for courses in the major must be approved by a faculty adviser. It is recommended that the student complete a preliminary master plan of courses as soon as possible after declaring the major.

Impacted Program. The criminal justice administration major is designated as an impacted program and specific regulations related to admissions are imposed. Consult the department for regulations and admissions criteria.

Courses

LOWER DIVISION COURSE

200. Introduction to Criminal Justice Administration (3) I, II (CAN AJ 2)

Survey of the structure, functions and problems of controlling criminal activity while preserving individual freedoms in a democratic society.

UPPER DIVISION COURSES (Intended for Undergraduates)

301. Social Control, Social Policy and Administration of Justice (3) I, II

Prerequisites: Criminal Justice Administration 200 with a grade of C or better and completion of all other lower division preparation for the major courses.

Interrelationship of social control, social policy and administration of criminal justice in contemporary American society.

305. Professions, Practices and Ethics in Criminal Justice Administration (3) I

Prerequisite: Criminal Justice Administration 301.

Professional roles and responsibilities of practitioners and administrators in criminal justice agencies, including consideration of the ethical responsibilities of criminal justice practitioners.

310. Law Enforcement Administration (3)

Administrative relationships within the criminal justice process with special reference to problems of courts and police and probation agencies.

320. The Administration of Criminal Law (3)

Prerequisite: Criminal Justice Administration 301.

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.

321. Juvenile Justice Administration (3)

Prerequisite: Criminal Justice Administration 301.

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.

330. Contemporary Correctional Administration (3)

Prerequisite: Criminal Justice Administration 301.

Contemporary policies and practices of local, state and federal correctional agencies, the influence of reform movements, and the interrelationship of corrections with other criminal justice system components.

333. Judicial Administration (3)

Prerequisites: Criminal Justice Administration 301 and Public Administration 301.

Review of significant developments at the 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.

420. Constitutional Issues in the Administration of Justice (3)

Prerequisites: Criminal Justice Administration 200 and 301.

Constitutional legal theories and principles, especially the Fourth, Fifth, Sixth, and Eighth Amendments to the Constitution, as they affect criminal justice procedures and practices.

430. Prisons in Theory and Practice (3) Cr/NC (Offered only in Extension)

Two lectures and three hours of supervised activity.

Prerequisites: Criminal Justice Administration 200 and consent of instructor.

Design and operation of state and federal prisons in California from the perspective of staff and inmates. Onsite study and critique of facilities.

470. Special Populations in Criminal Justice (3)

Prerequisite: Criminal Justice Administration 200.

Interactions between criminal justice system and populations such as women, racial, and ethnic minorities, aging offenders and offenders with AIDS and other chronic illnesses and disabilities.

496. Selected Topics in Criminal Justice Administration (1-3)

Selected current topics in criminal justice administration. 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. (Formerly numbered Criminal Justice Administration 495.)

497. Investigation and Report (3) Cr/NC I, II

Prerequisites: Consent of instructor and senior standing.

Analysis of special topics.

498. Internship in Criminal Justice Administration (2-6) Cr/NC I, II

Prerequisites: Consent of instructor and senior standing.

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.

499. Special Study (1-3) Cr/NC I, II

Prerequisites: Twelve units of upper division criminal justice administration and consent of instructor.

Individual study. Maximum credit six units.

UPPER DIVISION COURSES (Also Acceptable for Advanced Degrees)

502. Juvenile Deviance and the Administration Process (3)

Prerequisite: Criminal Justice Administration 321.

Problems of implementing and evaluating policies and programs for prevention of juvenile delinquency and treatment of juvenile offenders; an assessment of the proposed standards and goals for juvenile justice administration.

510. Contemporary Issues in Law Enforcement Administration (3)

Prerequisite: Criminal Justice Administration 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.

520. Prosecutorial Function in Administration of Justice (3)

Prerequisite: Criminal Justice Administration 301.

Analysis of prosecutor's function at local, state and federal levels and in selected foreign nations, including appraisal of proposed national standards and goals for prosecutors.

531. Probation and Parole (3)

Prerequisite: Criminal Justice Administration 330.

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.

540. Applied Planning, Research and Program Evaluation in Criminal Justice Administration (3) I, II

Prerequisite: Criminal Justice Administration 301.

Application of planning, research and program development and evaluation principles to the field of criminal justice.

543. Community Resources in Criminal Justice Administration (3)

Prerequisite: Criminal Justice Administration 301.

Exploration of present and probable roles of public and private agencies and volunteers in criminal justice administration.

GRADUATE COURSES Refer to Bulletin of the Graduate Division.

Dance

In the College of Professional Studies and Fine Arts

OFFICE: Music 112
TELEPHONE: (619) 594-6031
FAX: (619) 594-1692
EMAIL: music.dance@sdsu.edu

Faculty

Director: Chambers
Professor: Sandback
Associate Professors: Hempel, Nunn, Willis

Offered by the School of Music and Dance

Major in dance with the B.A. degree in liberal arts and sciences.
Minor in dance.

The Major

The dance program in the School of Music and 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.

Philosophically, the 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.

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 student also stages original work in a senior recital. Dance activity courses provided in the school offer experiences for the general student population in modern, jazz, ballet, folk, and social forms.

Dance Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 10081)

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 64 units in dance courses can apply to the degree.

A minor is not required with this major.

For information regarding this program contact the adviser, Patricia R. Sandback, or the School of Music and Dance.

Preparation for the Major. Dance 110, 111, 121, 131, 141, 171, 181, 183, 221, 241, 253, 255, 256, 261 (four units), 271, 281, 285; Anthropology 102; Biology 212; Psychology 101. (45 units)

Foreign Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language as part of the preparation for the major. Refer to the section of this catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 35 upper division units to include Dance 321, 341, 353, 354, 365 (two units), 371, 381, 441, 453, 481, 483, 486, 487; Biology 336; Exercise and Nutritional Sciences 303.

Dance Minor

Prerequisites to the minor: Dance 110, 121, and 131. (6 units)

The minor in dance consists of a minimum of 24 units in dance, of which eight units must be upper division, to include Dance 141, 171, 181, 183, 241, 253, 255, 271, 341, 353, 354, and 371.

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

LOWER DIVISION COURSES

100. Dance Activity (1)

Two hours of activity

Open to all students. Provides physically skilled instruction and knowledge of ballroom, folk, ballet, jazz, and modern dance forms at the beginning and intermediate levels.

- A. Beginning Ballroom Dance
- B. Intermediate Ballroom Dance
- C. Beginning Folk Dance
- E. Beginning Ballet
- F. Intermediate Ballet
- G. Beginning Jazz Dance
- H. Intermediate Jazz Dance
- I. Beginning Modern Dance
- J. Intermediate Modern Dance

110. Historical and Contemporary Social Dance Forms (2) I

Four hours of activity.

Court and country dances of Renaissance and Baroque periods. Social dances of the nineteenth and twentieth centuries.

111. Ethnic Dance Forms (2) II

Four hours of activity.

Techniques, styles, and rhythms of traditional dance in selected cultures.

121. Ballet I (2) I

Four hours of activity.

Prerequisite: Dance majors and minors only.

Ballet skills for dance majors and minors emphasizing placement, coordination, ballet terminology, and technical principles.

131. Jazz Dance I (2)

Four hours of activity.

Prerequisite: Dance majors and minors only.

Jazz dance technique and fundamentals.

141. Modern Dance I (3) I

Six hours of activity.
Prerequisite: Open only to dance majors and minors.
Basic modern dance skills with emphasis on alignment.

171. Dance Production I (1) Cr/NC I

Three hours of laboratory.
Technical experience in dance production.

181. Introduction to Dance (3) I, II

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.

183. Rhythmic Analysis (2) II

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.

221. Ballet II (2) II

Four hours of activity.
Prerequisite: Dance 121.
Ballet skills for dance majors emphasizing increased complexity, strength, and endurance.

241. Modern Dance II (3) II

Six hours of activity.
Prerequisite: Dance 141.
Continuation of development of modern dance skill with emphasis on function of alignment and articulation of the extremities in motion.

253. Choreography I (2) I

Four hours of activity.
Using concepts of space, time, and energy to investigate and explore basic elements of choreography. Studies and compositions emphasizing solo and small group works.

255. Dance Improvisation I (1) II

Two hours of activity.
Exploring improvisation through specific stimulus leading to the acquisition of basic improvisational skills.

256. Dance Improvisation II (1) I

Two hours of activity.
Prerequisite: Dance 255.
Practice in more complex arrangements of improvisation.

261. Dance Rehearsal and Performance (1) Cr/NC II

Three hours of laboratory.
Prerequisite: Entrance by audition.
Practical experience in departmental public performance. Maximum credit four units.

271. Dance Production II (1) Cr/NC II

Three hours of laboratory.
Prerequisite: Dance 171.
Technical experience in dance production.

281. Dance in World Cultures (2) I

Prerequisites: Dance 111 and Anthropology 102.
Dance in selected cultures; geographic, historical, social, and aesthetic factors which have shaped development and function.

285. Dance Pedagogy (2) I

Four hours of activity.
Teaching theory as applied to ballet, modern, jazz, and social dance for adult populations.

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)

321. Ballet III (2) II

Four hours of activity.
Prerequisite: Dance 221.
Ballet skills for dance majors emphasizing turns, jumps, batterie, extended sequences, and movement quality.

341. Modern Dance III (3) I

Six hours of activity.
Prerequisite: Dance 241.
Progressively difficult movement patterns based on previously developed skills with emphasis on elevation, rhythm, body design, and dynamic flow of movement.

353. Choreography II (2) II

Four hours of activity.
Prerequisite: Dance 253.
Introducing large group works, solo and small group work in organizing more complex arrangements of the basic elements of dance composition. Utilizing music and sound as aural contributions to choreography.

354. Choreography III (2) I

Four hours of activity.
Prerequisite: Dance 353.
Approaching dance as a fundamental means of communication. Recognizing the relationship between form and content.

365. University Dance Company: Major Performance (1) Cr/NC I

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. Maximum credit four units.

371. Dance Production III (1) Cr/NC I

Three hours of laboratory.
Prerequisite: Dance 271.
Technical experience in dance production.

381. Dance History (3)

Prerequisite: Dance 181.
Integrated approach to understanding of historical forces shaping the development of dance.

398. Dance Internship (1-3)

Prerequisite: 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.

441. Modern Dance IV (3) II

Six hours of activity.
Prerequisite: Dance 341.
Advanced modern dance techniques based on skills developed in Dance 141 through Dance 341 with emphasis on performance qualities in projection, vitality, and executing.

453. Choreography IV (2) II

Four hours of activity.
Prerequisite: Dance 354.
Choreography of solo and group works utilizing symbiotic relationship of movement, sound, lighting, costuming, and other interdisciplinary media. Presentation of a recital.

481. Dance Philosophy and Criticism (2) I

Prerequisite: Dance 381.
Philosophy and aesthetics of dance. Historical foundations of dance criticism. Major contemporary schools of thought. Professional preparation and function of the dance critic.

483. Dance Notation (3) I

Prerequisite: Completion of preparation for the major in dance.

Theories and application of dance notation systems and other methods of recording dance. Basic skills in writing dance in Labanotation; reading notated dance scores; experiences in recording ethnic, ballet, jazz, and modern dance.

486. Dance Practicum: Folk, Square, Ballroom (2) II

Four hours of activity.

Prerequisite: Dance 285.

Teaching techniques in folk, square, and ballroom dance and practice in the use of these techniques.

487. Dance Practicum: Modern, Ballet, Jazz (2) II

Four hours of activity.

Prerequisite: Dance 285.

Teaching techniques in modern dance, jazz dance, and ballet and practice in the use of these techniques.

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.

499. Special Study (1-3) I, II

Prerequisite: Consent of the dance director.

Individual study. Maximum credit six units.

Drama

Refer to "Theatre" in this section of the catalog.

Economics

In the College of Arts and Letters

OFFICE: Nasatir Hall 304
TELEPHONE: (619) 594-1675
FAX: (619) 594-5062

Faculty

Emeritus: Anderson, Babilot, Barckley, Flagg, Gifford, Jencks, Leasure, Nam, Neuner, Poroy, Sebold, Steinberg, Turner, Venieris

Chair: Thayer

Professors: Adler, Boddy, Clement, Frantz, Green, Grossbard-Shechtman, Kartman, Madhavan, Popp, Stewart, Thayer

Associate Professors: Gerber, Hambleton

Assistant Professors: Brunner, Kazimi

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.

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 curriculum in economics satisfies a wide range of career goals and student interests. Majors may find employment in government positions, financial institutions, business firms, 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 beginning 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, investments, or industry.

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.

Economics Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 22041)

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, and either Economics 201 or Statistics 119; one course from Mathematics 120, 121, 150; and three units of Social Science 201 or Information and Decision Systems 180. (15-17 units)

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 24 upper division units in economics to include Economics 320, 321, and 441, and 15 units of electives in economics. Students are encouraged to complete the required courses during their junior year. A maximum of three units of Economics 495 and a maximum of three units of Economics 499 will count toward the 24 upper division unit requirement.

The department strongly recommends that all majors consult an undergraduate adviser. The following program areas have been devised to aid students in selecting their upper division courses.

Economics of Business and Government: Students interested in preparing for operational positions in business or government are advised to take courses from among Economics 360, 380, 401, 421, 422, 452, 453, 454, 458, 474, 490, and 592.

General Economics: Students seeking a general background in the discipline are encouraged to take at least one course from each of the following: Economic History and Systems: Economics 311, 330, 336, 338; Human Resources: Economics 365, 380, 382, 489; International Economics: Economics 336, 360, 365, 382, 464, 465, 561, 565, 592; Public Issues: Economics 401, 422, 452, 453, 454, 458, 474, 489, 490.

Pre-Law: Students interested in preparing for law school are strongly recommended to take courses from among Economics 380, 401, and 490. Also recommended are Economics 330, 453, 454, and 474.

Theoretical Economics: Students interested in building a theoretical background in economics are advised to take courses in alternative economic theories, history of thought and quantitative economics to include Economics 307, 311, 330, 338, 360, 365, 380, 382, 421, 422, 453, 464, 474, 561, and 592.

Students considering graduate school should consult an adviser.

Emphasis in International Economics (Major Code: 22042)

Preparation for the Major. Economics 101, 102, and either Economics 201 or Statistics 119; one course from Mathematics 120, 121, 150; and three units of Social Science 201 or Information and Decision Systems 180. (15-17 units)

Foreign Language Requirement. Demonstrated competency at the ACTFL-ETS intermediate, mid-level, or a C or better in a three unit upper division foreign language course; four consecutive courses of college study in one foreign language, or demonstrated competency (intermediate-low) at that level.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 33 upper division units (27 units in economics and six units from the College of Business Administration) to include Economics 320, 321, 441, and 490; three units from Economics 360, 561, or 592; six units from Economics 336, 464, 465, 565, or

496 in Pacific Rim economies or other international areas; three units from Economics 330, 365, or 489; three units from Economics 382, 453, 454, or 495 (international content of internship subject to departmental approval); six units selected from Finance 323 and 329; or Marketing 370 and 376; or Management 350 and 405*.

* Prerequisites for this course which are not included in the minimum unit requirement for the major include Finance 323, Information and Decision Systems 301 or 302, and Marketing 370.

Economics Minor

Prerequisites to the minor include one of the following: Economics 100, 101, or 102.

The minor in economics consists of a minimum of 15 units in economics, 12 units of which must be in upper division courses. Students must select their 12 upper division units from the economics courses in one of the four areas described in the major. In addition, students may include one of the following: Economics 320, 321, or 441 as appropriate to their chosen area.

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

LOWER DIVISION COURSES

100. Contemporary Economic Problems (3) I, II

Investigates economic bases for such current problems as inflation, unemployment, economic power, consumer protection, poverty, discrimination, urban and environmental deterioration, and international domination. Examines such policies as fiscal-monetary policy, tax reform and government controls and provision of services.

101. Principles of Economics (3) I, II, S (CAN ECON 2)

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.

102. Principles of Economics (3) I, II, S (CAN ECON 4)

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.

201. Statistical Methods (3) μ I, II

Prerequisites: Course in intermediate algebra and satisfaction of the Entry-Level Mathematics requirement.

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; Biology 215; Civil and Environmental Engineering 160; Political Science 201; Psychology 270; Sociology 201; Statistics 119, 250.

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)

301. Collection and Use of Data in Economics (3)

Prerequisites: Economics 101 and 102; Economics 201 or Statistics 119; and Information and Decision Systems 180 or Social Science 201.

Economic data gathering via Internet and other sources, data entry into spreadsheets and graphing techniques, statistics using spreadsheets, and introduction to basic regression.

307. Mathematical Economics (3)

Prerequisites: Economics 101, 102, and Mathematics 121 or 150.

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.

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.

320. Intermediate Macroeconomic Theory (3) I, II, S

Prerequisite: Economics 101 or Economics 100 with approval of department. Recommended: Mathematics 120 or 121 or 150.

Determination of output, income, unemployment, and inflation. Policies for economic stabilization and growth in an open economy.

321. Intermediate Microeconomic Theory (3) I, II, S

Prerequisite: Economics 102 or Economics 100 with approval of department. Recommended: Mathematics 120 or 121 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.

330. Comparative Economic Systems (3)

Prerequisites: Six units of economics to include Economics 102; and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences. General Education prerequisite not required for Economics majors.

The economic aspects of laissez-faire and regulated capitalism, cooperatives, socialism, communism, nazism, fascism. Criteria for evaluating economic systems. The individual and government in each system. Planning in a liberal capitalistic society.

336. Economic History of Emerging Nations (3)

Prerequisite: Six units of economics to include Economics 101.

Evolution of economic organization, institutions, and policies of Africa, Asia, and Latin America. Regional emphasis will vary. Maximum credit six units.

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.

360. International Economic Problems (3)

Prerequisites: Economics 101 and 102.

International problems, economic communities, organizations, and other selected topics.

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.

380. Labor Problems (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.

382. Economics of Marriage and the Family (3)

Prerequisite: Economics 102.

Microanalysis of marriage and divorce; labor supply and marriage; marriage and productivity, consumption and savings; macroanalysis of household structure and the economy.

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.

421. Applied Microeconomics (3)

Prerequisites: Economics 321 and Mathematics 120 or 121 or 150.
Consumer and producer behavior using mathematical optimization techniques. Mathematical approaches to oligopoly, bargaining theory and to policy issues.

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.

441. Introduction to Econometrics (3) I, II

Prerequisites: Economics 301; Mathematics 120 or 121 or 150; Recommended: Economics 320 or 321.

Econometric techniques with emphasis on single-equation models. Applied skills learned through computer assignments. (Formerly numbered Economics 341.)

452. Economics of Energy Resources (3)

Prerequisite: Six units of economics.
Economic structure of energy supply in the United States: electric power, fossil fuels, nuclear energy. Economic potential of alternative energy sources. Public policy issues: oil imports and self-sufficiency; energy costs, conservation, and curtailment; energy growth and its environmental impact.

453. Economics and Ecology (3)

Prerequisites: Economics 101 and 102.
Relation of ecological problems to basic economic institutions. Examination of the apparent conflict between economic needs and ecological requirements. Economics of air, fresh water, ocean and land pollution, overpopulation and natural resource utilization. Investigation of possible solutions.

454. Economics of the Ocean (3)

Prerequisites: Economics 101 and 102.
Economic analysis of fisheries, seabed resources, shipping lanes, allocation of the coastal zone, and ocean pollution. Economic implications of alternative legal arrangements concerning the ocean.

458. Urban and Regional Economics (3)

Prerequisites: Economics 101 and 102.
Major influences on the economic conditions of urban and nonurban areas; specific urban problems including housing, land use, and growth. Discussion of San Diego problems.

464. Economic Problems of Latin America (3)

Prerequisites: Six units of economics to include Economics 101; and completion of the General Education requirement in Foundations 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.

465. Economic Problems of South and East Asia (3)

Prerequisites: Six units of economics to include Economics 101; and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences. General Education prerequisite not required for Economics majors.

Economic development, institutions, and problems of China, India, and other developing countries in the region.

474. Industrial Organization (3)

Prerequisites: Economics 101 and 102.
Causes and implications of economic concentration and monopoly power. Evaluation of industry structure, conduct, and performance in terms of social and economic goals.

489. Economics and Population (3)

Prerequisites: Six units of economics to include Economics 102; and completion of the General Education requirement in Foundations 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.

490. Money and Banking (3) I, II, S

Prerequisites: Economics 101 and 102.
The elements of monetary theory. History and principles of banking with special reference to the banking system of the United States.

495. Economics Internship (3) Cr/NC I, II, S

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.

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 six units.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.
Individual study. May be repeated for a maximum of six units. Maximum credit six units.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

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.

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.

592. International Monetary Theory and Policy (3)

Prerequisite: Economics 320 or 490.
International monetary spillovers from domestic macroeconomic policies. Foreign exchange markets and balance of payments. Fixed, flexible and managed exchange rates. Bretton Woods, international monetary fund, and world debt crisis.

596. Experimental Topics (3)

Prerequisite: Consent of instructor.
Intensive study in specific areas of economics. Topics to be announced in the Class Schedule. 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. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

**GRADUATE COURSES
Refer to Bulletin of the Graduate Division.**

Education

In the College of Education

OFFICE: Education 154
TELEPHONE: (619) 594-6091
FAX: (619) 594-7082

Accredited by the California Commission on Teacher Credentialing.

Faculty

Faculty assigned to teach in education are drawn from departments in the College of Education.

Courses

UPPER DIVISION COURSES (Intended for Undergraduates)

350. Education in American Society (3) I, II, S

Prerequisite: Completion of the General Education requirement in Foundations 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.

451. Introduction to Multicultural Education (3)

Overview of cultural pluralism in education, industry, business, other institutions, and society at large.

UPPER DIVISION COURSE (Also Acceptable for Advanced Degrees)

516. Foundations of Bilingual Education (1)

Prerequisite: Credit or concurrent registration in Education 451.
Overview of models of bilingual education programs for language minority students.

GRADUATE COURSES Refer to Bulletin of the Graduate Division.

“The best that an individual can do is to concentrate on what he or she can do, in the course of a burning effort to do it better.”

— *Elizabeth Bowen*

Educational Technology

In the College of Education

OFFICE: North Education 280
TELEPHONE: (619) 594-6718
FAX: (619) 594-6376

Accredited by the California Commission on Teacher Credentialing.

Faculty

Emeritus: Anthony, McAllister
Chair: Harrison
Professors: Allen, Dodge, Harrison, Rossett, Saba
Associate Professor: Ritchie
Assistant Professors: Baylor, Bober, Hoffman

Offered by the Department

Master of Arts degree in education.
Concentration in educational technology.
Specialization in educational computing.
Specialization in workforce education and lifelong learning.
Minor in educational technology.
Certificate in instructional software design (refer to *Bulletin of the Graduate Division*).
Certificate in instructional technology.
Certificate in workforce education and lifelong learning (refer to *Bulletin of the Graduate Division*).

Educational Technology Minor

The minor in educational technology consists of a minimum of 15 units in Educational Technology, 12 of which must be upper division selected from Educational Technology 470, 530, 540, 541, 544, 561, 572, and 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. A minimum of six upper division units must be completed in residence at San Diego State University.

Instructional Technology Certificate

To receive a certificate in instructional technology, candidates must meet departmental admission requirements which include relevant work experience or academic preparation, letters of recommendation, and a writing sample, and must complete the following 15 units of coursework: Educational Technology 540, 541, 544, and six units selected from Educational Technology 561, 572, or 596.

With the approval of the department, a student may apply no more than three units of coursework from the certificate program toward a major or minor.

Courses

UPPER DIVISION COURSES (Intended for Undergraduates)

470. Technologies for Teaching (3) I, II, S

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 clear teaching credential.

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.

499. Special Study (1-3) I, II

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)

530. Workforce Education and Lifelong Learning (3)

Prerequisite: Experience as an adult educator in settings such as adult schools or community colleges, job-training settings (JTPA and JOBS-sponsored education; the Job Corps), correctional facilities.

Principles of workforce education and lifelong learning. Workplace and continuing education of non-management employees in corporate and community-based settings.

532. Production of Instructional Materials (3) I, II

Six hours of activity.

Instructional media production for professionals in organizational settings such as hospitals, law offices, accounting firms, publishing companies. Use of videotape, laser disc, multi-image and digital telecommunications for training. Not open to students in educational technology degree and certificate programs or to students with credit in Educational Technology 541.

540. Educational Technology (3) I, II, S

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.

541. Multimedia Development (3) I, II, S

One lecture and six hours of laboratory.

Prerequisite: Basic computer literacy and elementary knowledge of an authoring system.

Systems, aesthetic, and learning theories applied to design of educational multimedia. Use of authoring systems to plan and prototype. Not open to students with credit in Educational Technology 532.

544. Instructional Design (3) I, II

One lecture and six hours of laboratory.

Prerequisites: Educational Technology 540 and 541. Pass departmental writing examination or complete Rhetoric and Writing Studies 503W with a grade of B+ or better.

Systematic design of products for education and training. Use of cognitive task analysis to determine instructional content. Development of instructional goals and product specifications. Rapid prototyping of instructional products.

561. Advanced Multimedia Development (3)

Six hours of activity.

Prerequisites: Educational Technology 540 and 541.

Research-based guidelines, design languages and object-oriented thinking applied to development of media-based learning systems. Two- and three-dimensional graphics, animation, video, sound, and virtual reality techniques.

572. Technology for Course Delivery (3) I, II

One lecture and six hours of laboratory.

Prerequisite: Educational Technology 541.

Use of technology to support planning, presenting and managing instructor-led courses.

596. Topics in Educational Technology (1-3)

Selected problems in educational technology. 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. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES Refer to Bulletin of the Graduate Division.

Electrical Engineering

In the College of Engineering

OFFICE: Engineering 409
TELEPHONE: (619) 594-5718

The undergraduate degree in Electrical Engineering is accredited by the Accreditation Board for Engineering and Technology, Inc.

Faculty

Emeritus: Brown, Chan, Learned, Lodge, Mann, Massey, Skaar, Stuart, Wilson

Chair: Szeto

Professors: Abut, Chang, Harris, f., Harris, J., Iosupovici, Lee, Lin, Marino, Panos, Szeto, Thyagarajan

Associate Professors: Bailey, Betancourt, Kolen, Ozturk

Assistant Professors: Park, Singh

Offered by the Department of Electrical and Computer Engineering

Doctor of Philosophy degree in applied mechanics.

Master of Science degree in electrical engineering.

Major in electrical engineering with the B.S. degree.

Certificate in rehabilitation technology (refer to *Bulletin of the Graduate Division*).

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 Accreditation Board for Engineering and Technology, Inc., 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 twelve units may be used for General Education credit from any one department or academic unit.

I. Communication and Critical Thinking: 9 units

1. Oral Communication (3 units)
2. Composition (3 units)
3. Intermediate Composition and Critical Thinking (3 units)

II. Foundations: 29 units

A. Natural Sciences and Quantitative Reasoning (17 units):

1. Physical Sciences (11 units)
Engineering students will take Chemistry 200 which includes a laboratory (5 units).
Physics 195 (3 units)
Physics 196 (3 units)
2. Life Sciences (3 units)
3. Laboratory (satisfied under A.1. above)
4. Mathematics/Quantitative Reasoning
Engineering students will take Mathematics 150, 3 units applicable to General Education.

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 in General Education, excluding courses numbered 500 and above.

IV. Explorations: 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.

B. Upper division Humanities (3 units from a department not selected in A above.)

C. Upper division Social and Behavioral Sciences (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 ECE profession are challenging and usually plentiful. ECE 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 goods and services that are necessary for a robust economy.

Electrical Engineering Major

With the B.S. Degree (Major Code: 09091)

The program below describes the 138 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, Electrical Engineering Laboratory Electives, and the Electrical Engineering Capstone Elective.

Preparation for the Major. Electrical Engineering 210; Chemistry 200; Computer Engineering 160, 270, 271; Engineering 280; Engineering Mechanics 202; Mathematics 150, 151, and 252; Physics 195, 196, 196L, 197, and 197L. (47 units, 14 units of which count toward General Education credit)

General Education. Engineering students must follow the specific General Education program outlined on the previous page. Other General Education requirements and limitations, as well as listings of specific General Education course electives are presented in Section IX of Graduation Requirements for the Bachelor's Degree. (Fifty units, including 14 units from preparation for the major which count toward General Education credit, and 3 units of American institutions which count toward General Education credit.)

American Institutions. 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. Students can also satisfy the American Institutions requirement with a single three unit course offered by the community colleges. See department for approved list of courses.

Upper Division Writing Requirement. Each student must pass the University Writing Examination or complete one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 52 upper division units to include the following required and elective courses. Required upper division courses in the major: Electrical Engineering 300, 310, 330, 330L, 340, 380, 410, 430, 430L, and 434. Upper division engineering elective: Three units

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Units</i>	<i>Spring Semester</i>	<i>Units</i>
Chem. 200, General Chemistry	5	CompE 160, Computer Prog. with C....	3
Math. 150, Calculus I.....	5	Math. 151, Calculus II	4
Phys. 195, Principles of Physics.....	3	Phys. 196, 196L Principles of Physics	4
General Education	3	General Education.....	6
	<hr/> 16		<hr/> 17

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Units</i>	<i>Spring Semester</i>	<i>Units</i>
CompE 270, Digital Systems.....	3	EE 210, Electrical Network Anal. I	3
Math. 252, Calculus III.....	4	CompE 271, Computer Org.....	3
Phys. 197, 197L, Principles of Physics.....	4	Engr. 280, Methods of Analysis	3
General Education	6	EM 202, Mechanics for Elec. Engrs.	3
	<hr/> 17	General Education	6
			<hr/> 18

JUNIOR YEAR

<i>Fall Semester</i>	<i>Units</i>	<i>Spring Semester</i>	<i>Units</i>
EE 300, Comp. and Stat. Methods	3	EE 340, Elec. and Magnetic Fields	3
EE 310, Electrical Network Anal. II.....	3	EE 380, Elec. Energy Conversion.....	3
EE 330, 330L, Fund. Engr. Electronics.....	4	EE 410, Signals and Systems	3
Upper Division Engr. Elective	3	EE 430, Analysis and Design of Electronic Circuits	3
General Education	3	General Education	6
	<hr/> 16		<hr/> 18

SENIOR YEAR

<i>Fall Semester</i>	<i>Units</i>	<i>Spring Semester</i>	<i>Units</i>
EE 430L, Electronic Circuits Lab.....	1	EE Laboratory Electives	2
EE 434, Elec. Matls. and Devices.....	3	Professional Electives.....	12
Professional Electives	9	American Institutions	3
American Institutions.....	3		
General Education	3		
	<hr/> 19		<hr/> 17

selected from Civil and Environmental Engineering 301 or Engineering Mechanics 340 or Mechanical Engineering 260 or Mechanical Engineering 352. Professional electives: Eighteen units selected from any upper division electrical engineering and computer engineering courses and up to three units from approved upper division courses from other departments. Electrical Engineering laboratory electives: Two units selected from any non-required upper division electrical engineering laboratory courses. Electrical Engineering capstone design elective: Three units selected from a list of design courses approved by the department.

Elective courses are subject to the approval of the faculty adviser and the department chair. The student must file an approved Master Plan during the first semester of the junior year specifying the electives selected. Changes to the Master Plan are permitted at any time upon approval by the department chair.

Courses

NOTE: Prerequisites will be enforced in all undergraduate 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.

All listed prerequisite courses for Electrical Engineering courses must be satisfied with a grade of C- or better.

LOWER DIVISION COURSES

203. Principles of Electrical Engineering (3) I, II

Prerequisites: Physics 196 and Mathematics 151.

Direct and alternating current analysis, phasor diagrams, single-phase and three-phase power, diodes, transistors, integrated circuits, transformers, motors, and generators. Not acceptable for electrical, aerospace, or civil engineering majors.

204. Principles of Electrical Engineering (3) I, II

Prerequisites: Mathematics 151 and Physics 196.

Circuit analysis, phasor diagrams, single-phase and three-phase power, semiconductor devices and applications, and energy conversion devices. Not acceptable for electrical or mechanical engineering majors.

210. Electrical Network Analysis I (3) I, II (CAN ENGR 12)

Prerequisites: Physics 196 and Mathematics 151.

Circuit analysis by reduction methods, source transformations, mesh and nodal analysis. Operational amplifier model, transient analysis, alternating current circuits, impedance, power, phasor diagrams, and three-phase balanced networks. Computer programming and application of computer software for circuit analysis.

UPPER DIVISION COURSES (Intended for Undergraduates)

300. Computational and Statistical Methods for Electrical Engineers (3) I, II

Two lectures and three hours of laboratory.

Prerequisites: Computer Engineering 160 and Mathematics 151.

Deterministic and statistical concepts and models in electrical engineering. Associated plotting and numerical techniques. Graphical representation of data and signal processing using computer-aided engineering tools.

303. Electronics, Instrumentation, and Electrical Energy Conversion (3) I, II

Prerequisite: Electrical Engineering 203 with minimum grade of C.

Theory and application of diodes and transistors in typical electronic circuits. Instrumentation and electronic measuring devices. Fundamentals of electro-mechanical energy conversion including motors and transformers. Not open to electrical engineering majors.

310. Electrical Network Analysis II (3) I, II

Prerequisites: Electrical Engineering 210 and Mathematics 252.

Transient and frequency response of RLC circuits. Mutual inductance generalized network analysis using Laplace transformations, network functions, poles and zeros, stability of circuits, convolution integrals, Bode diagrams, two-part networks, computer-aided analysis of circuits.

330. Fundamentals of Engineering Electronics (3) I, II

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.

330L. Engineering Electronics Laboratory (1) I, II

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.

340. Electric and Magnetic Fields (3) I, II

Prerequisites: Electrical Engineering 210 and 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.

380. Electrical Energy Conversion (3) I, II

Prerequisite: Electrical Engineering 210.

Magnetic circuits, transformers and polyphase AC networks. Fundamentals of electro-mechanical energy conversion; induction motors, synchronous machines and DC machines.

380L. Electrical Energy Conversion Laboratory (1) I, II

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.

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.

403. Biomedical Instrumentation (3)

Prerequisite: Electrical Engineering 303 or 330.

Instrumentation systems to monitor, control and record physiological functions.

410. Signals and Systems (3) I, II

Prerequisites: Electrical Engineering 300 and 310.

Linear time-invariant systems, Fourier analysis, continuous and discrete signals and systems, filtering, sampling, and Z-transform techniques.

430. Analysis and Design of Electronic Circuits (3) I, II

Prerequisites: Electrical Engineering 310, 330, and Engineering 280.

Single and multiple transistor amplifiers, power stages. Frequency response, feedback, stability, and operational amplifier circuits.

430L. Electronic Circuits Laboratory (1) I, II

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.

434. Electronic Materials and Devices (3) I, II

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.

440L. Physical Electronics Laboratory (1)

Prerequisites: Electrical Engineering 330 and 340.

Experimental study of electrical properties of semiconductors, light transmission in optical fibers, transmission and reflection of electromagnetic waves, laser oscillation and amplification, and gaseous electrical discharge.

450. Transmission Lines for High Speed Electronics and Microwaves (3)

Prerequisites: Electrical Engineering 330 and 340.

Theory and applications of transmission lines. Transmission-line equations and four transmission-line parameters, pulses on transmission lines, and impedance matching techniques, scattering matrix, microstrip line, coplanar waveguides, and various microwave transmission line components.

458. Communication Systems I (3)

Prerequisite: Credit or concurrent registration in Electrical Engineering 410.

Analog and digital communication systems. Amplitude and frequency modulation, pulse modulation, and PCM. Introduction to information theory.

483. Power Distribution Systems (3) II

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.

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.

499. Special Study (1-3) I, II

Prerequisite: Approval of project adviser and department chair. Individual study. Maximum credit six units.

UPPER DIVISION COURSES (Also Acceptable for Advanced Degrees)

502. Electronic Devices for Rehabilitation (3)

Two lectures and three hours of laboratory.

Prerequisite: Electrical Engineering 303 or 330.

Recent developments in electronic assistive devices and microcomputers for persons with various disabilities; assessment of disabled persons for suitable technological assistive devices.

520. Feedback Control Systems (3) I

Prerequisite: Electrical Engineering 410.

Analysis of regulatory systems including servomechanisms by the Laplace transform method. System performance and stability; Nyquist, Bode, and root-locus diagrams; elementary synthesis techniques. Practical components and examples of typical designs.

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.

534. Solid-State Devices (3)

Prerequisite: Electrical Engineering 434.

Conduction theory of solids. Characteristics of tunnel, backward, breakdown, multilayer and varactor diodes; silicon controlled rectifiers and switches, unijunction transistors, hot electron devices. Lasers and laser applications.

539. Instrumentation Circuits I (3)

Prerequisite: Electrical Engineering 430.

Design and analysis of hybrid analog/digital electronic sub-systems incorporated into modern instrument design. Emphasis on operational amplifier based circuit design and analog-to-digital and digital-to-analog conversion processes.

540. Microwave Devices and Systems (3)

Prerequisite: Electrical Engineering 340. Recommended: Engineering 510.

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.

540L. Microwave Measurements Laboratory (1)

Three hours of laboratory.

Prerequisites: Credit or concurrent registration in Electrical Engineering 430L and 540.

Experimental study of microwave generation including klystrons, Gunn and IMPATT oscillators. TWT and microwave transistor amplifiers. Microwave modulation and detection. Microwave transmission and antennas.

541. Electro-Optics (3) II

Prerequisite: Electrical Engineering 340.

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.

546. Optical Fiber Communications Systems (3)

Prerequisite: Electrical Engineering 434.

Optical fiber attenuation and dispersion, light-emitting diodes and laser diodes, PIN diodes and avalanche photodiodes, receiver designs, optical power budgets and rise time budgets, applications in digital and analog communication systems.

553. Stochastic Signals (3) I

Prerequisite: Electrical Engineering 410.

Random signals, correlation functions, power spectral densities, the Gaussian process, narrow band processes. Applications to communication systems.

556. Digital Signal Processing (3)

Prerequisite: Electrical Engineering 410 or Physics 516.

Digital signal processing. Discrete-time signals, transform techniques, and digital filters. Design of FIR and IIR filters, FFTs, and finite length effects on digital systems.

558. Communication Systems II (3) II

Prerequisite: Electrical Engineering 458.

Performance of analog and digital communication systems. Effects of noise and spectral characteristics.

558L. Communications and Digital Signal Processing Laboratory (1)

Prerequisite: Electrical Engineering 558.

Experiments in modulation techniques, effects of noise on system performance, digital filters, and signal processing.

570. Advanced Digital Circuits (3)

Prerequisite: Computer Engineering 470.

Digital applications of linear devices, the digital/analog interface, and ultra high speed logic devices.

580. Modern Power Systems I (3) I

Prerequisites: Engineering 280, Electrical Engineering 310 and 380.
Modern power system elements; calculation of load flow, fault currents, and system stability.

581. Modern Power Systems II (3) II

Prerequisite: Electrical Engineering 580.
Transient response of modern power system elements; positive, negative and zero sequence impedance; subharmonic effects.

582. Power Relay Systems (3) I

Prerequisite: Electrical Engineering 380.
Power relays including metering and control as used in modern power systems. Characteristics of operations and applications of equipment. Demonstrations on individual component relays. Basic relay calculations.

596. Advanced Electrical Engineering Topics (1-3) I, II

Prerequisite: Consent of instructor.
Modern developments in electrical engineering. 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 credit of six units of Electrical Engineering 596 applicable to a 30-unit master's degree.

GRADUATE COURSES

Refer to the Bulletin of the Graduate Division.

Engineering

In the College of Engineering

OFFICE: Engineering 203
TELEPHONE: (619) 594-6061

The College of Engineering undergraduate programs in aerospace, civil, electrical, and mechanical engineering are accredited by the Accreditation Board for Engineering and Technology, Inc.

Faculty

Faculty assigned to teach courses in engineering are drawn from departments in the College of Engineering.

Minor in Engineering

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

LOWER DIVISION COURSES

120. Engineering Problem Analysis (2) I, II

One lecture and three hours of laboratory.

Prerequisite: Concurrent registration in Mathematics 150. **Proof of completion of prerequisite required:** Copy of transcript or enrollment verification.

Analysis of engineering problems and solutions using the digital computer. Fundamentals of programming and programming language commands.

280. Methods of Analysis (3) I, II

Prerequisite: Mathematics 252 with minimum grade of C.

Selected topics from ordinary differential equations, the Laplace transform, Fourier series, and linear algebra, with engineering applications.

296. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of six units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

“Genius without education
is like silver in the
mine.”

— Ben Franklin

UPPER DIVISION COURSES (Intended for Undergraduates)

320. Control of the Human Environment (3) I, II

Prerequisites: Upper division standing and completion of six or more units of the General Education requirement in Foundations, II.A. Natural Sciences and Quantitative Reasoning.

Human interaction with the land, water and air environment; environmental pollution; role of engineering in controlling the environment. Not open to engineering majors.

430. Principles of Engineering Economy (3) I, II

Prerequisite: Mathematics 252.

Application of the mathematics of finance to engineering and managerial decision making.

496. Advanced Engineering Topics (1-3) I, II

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.

UPPER DIVISION COURSE (Also Acceptable for Advanced Degrees)

510. Methods of Analysis (3) I, II

Prerequisite: Engineering 280 with minimum grade of C.

Selected topics from vector calculus, partial differential equations, and complex analysis, with engineering applications.

GRADUATE COURSE Refer to Bulletin of the Graduate Division.

English

In the College of Arts and Letters

OFFICE: Adams Humanities 4158
TELEPHONE: (619) 594-5307
FAX: (619) 594-4998
WWW: <http://www-rohan.sdsu.edu/dept/english/engl.html>

Faculty

Emeritus: Adams, Baker, Benson, Brashear, Brown, Bumpus, Burnett, Chater, Gross, Ingham, Kohler, Kuznets, McLeod, Monteverde, Neumeyer, O'Reilly, Perkins, Redding, M., Redding, R., Sanderlin, Sandstrom, Santangelo, Stiehl, Sullivan, Taylor, Tozer, Vanderbilt, Wheeler, Widmer

Chair: Wall

Professors: Alcosser, Borkat, Butler, Chin, Davis, Edson, Farber, Gellens, Gervais, Gregory, Griswold, Jaffe, Kehler, Little, McCaffery, Moramarco, Nelson, Polkinhorn, Rogers, Rother, Savvas, Sheres, Shojai, Wall

Associate Professors: Allison, Boe, Colquitt, Herman, Hicks, Koolish, Matlin, Nericcio, Robinett, Scott, Shumaker, Stampfl

Assistant Professors: Amtower, Cummins-Lewis

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.

Teaching major in English for the single subject teaching credential.

Minor in English.

Certificate in children's literature.

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 twelve 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.

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. In addition the department offers certificates in Children's Literature.

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.

The SDSU Placement Office 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.

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.

English Major

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 15011)

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 English and comparative literature courses can apply to the degree.

A minor is not required with this major.

Preparation for the Major. Twelve units to include English 260A-260B (unless replaced by English 560A and 560B); three units selected from English 220, Comparative Literature 210, 270A, 270B, 296; and three units selected from English 250A, 250B, 280, 281, 296.

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. English 508W, 581W, or 584W*, with a grade of C (2.0) or better.

Major. A minimum of 30 upper division units in English selected with the approval of the adviser, to include English 533, at least three units in British Literature before 1800 (English 530, 531, 534*, 536, 537, 538A, 538B, 540A, 541A, 541B), three units in British literature after 1800 (English 540B, 542, 543, 544, 547, 548), six units in American literature (English 519 and the 520 series) including at least one period course (English 522, 523, 524, 525), three units in writing (English 508W, 580*, 581W*, 584W*), and 12 units of electives in English and Comparative Literature.

Students who have not taken English 260A as part of the preparation for the major must take English 560A. Students who have not taken 260B must take 560B. English 560A or 560B may not be used to satisfy requirement for British literature before and after 1800, but may count as electives in the major if they are not used as units in preparation for the major. Six units of courses in comparative literature may be included as part of the major in English.

* Additional prerequisites required.

NOTE: In addition to the courses listed above, appropriate sections of English 496, 499, 526, 527, 528, 549, American Studies 580, and selected comparative literature courses may be used to satisfy the requirements for the major if approved by the departmental adviser.

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

With the B.A. Degree in Liberal Arts and Sciences

All candidates for a teaching credential must complete all requirements as outlined in this section of the catalog under Policy Studies or Teacher Education.

Preparation for the Major. English 250A-250B or 260A-260B, English 280 or 281, English 220 or Comparative Literature 270A or 270B; Communication 200 or Journalism 220 or Theatre 115; Humanities 140 or Theatre 120; Linguistics 101; Rhetoric and Writing Studies 100 and 200. (27 units)

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. English 508W or Rhetoric and Writing Studies 500W.

Major. A minimum of 45 upper division units to include English 533; English 560A and 560B (for those who took English 250A-250B) or six units from English 522, 523, 524, 525 (for those who took English 260A-260B); Comparative Literature 562 or Theatre 310 or 480; Linguistics 420 or 530; Rhetoric and Writing Studies 509; three units selected from Communication 360*, 371, 391, 407*, 408, 491*, Linguistics 410, 520, 524, 550*, 551; and completion of courses selected from the following categories:

1. Ethnic Literature (3 units): English 519, 520, Africana Studies 460, 461, 462, 463, 464, American Indian Studies 430, Chicana and Chicano Studies 335, 464.
2. Pre-Nineteenth Century Literature (3 units): English 530, 531, 534, 536, 537, 538A or 538B, 540A, 541A or 541B.
3. Nineteenth or Twentieth Century Literature (3 units): English 522, 523, 524, 525, 540B, 542, 543, 544, 547, 548; Comparative Literature 445, 460, 513, 514.
4. Genre Course (3 units): Comparative Literature 561, 562, 563, English 527, 540A, 540B, 541A, 541B, Theatre 460A, 460B.

Twelve unit specialization in literature, creative writing or expository writing, as follows:

Literature: Courses listed under 2 and 3 above, plus English 519 and 520.

Creative Writing: English 570, 571, 573, 576, 577, 579, 580, 581W, 583, 584W, 587.

Expository Writing: English 508W, 584W, Rhetoric and Writing Studies 500W, 503W, 504, 506.

No course can fulfill more than one requirement. Fifteen courses are required.

* Additional prerequisites required.

NOTE: Sections of English 526, 527, 528, 549, and 596 may be substituted where appropriate if approved in writing by the English Department credential adviser.

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

The minor in English consists of a minimum of 15 units, 12 units of which must be in upper division courses. The department offers minors specifically tailored to complement students' majors. All minors will include English 220 (unless a substitution is approved by the departmental adviser) and 12 upper division units selected from one of the following areas, dependent upon the student's major:

Social Science disciplines, one course from each group:

1. A course in Shakespeare: English 302 or 533.
2. A course in expository writing: Rhetoric and Writing Studies 500W or 503W.
3. A course in folk or popular literature: English 301, 405, 491, 501, 502, Comparative Literature 470, or approved sections of special topics courses.
4. A course in contemporary literature: English 525, 548, or approved sections of special topics courses.

Fine Arts disciplines, one course from each group:

1. A course in Shakespeare: English 302 or 533.
2. A course in genre study or criticism: English 405, 501, 502, 508W, 527, 570*, 571*, 573*, 577*, 579*, Comparative Literature 561, 562, 563.
3. A course in literature and other arts: English 493, Comparative Literature 594, 595, or approved sections of special topics courses.
4. A course in creative writing: English 580*, 581W*, 583*, 584W*, 587*, or approved sections of special topics courses.

Business disciplines, one course from each group:

1. A course in expository writing: Rhetoric and Writing Studies 500W or 503W.
2. A course in Shakespeare, literature and psychology, literature and film, or modern American fiction: English 301, 302, 491, 493, 494, 533.
3. A course in American literature: English 519, 520, 522, 523, 524, 525, or approved sections of 526, 527, 528.
4. A course in British literature: English 540A, 540B, 544, 547, 548, or approved sections of 549.

Humanities disciplines, one course from each group:

1. A course in Shakespeare: English 302 or 533.
2. A course in genre study or criticism: English 405, 501, 508W, 527, 570*, 571*, 573*, 577*, 579*, Comparative Literature 561, 562, 563.
3. A course in literary history: English 560A, 560B, any course in the 520, 530, and 540 series, Comparative Literature 511, 512, 513, 514.
4. A second course in literary history or a course in literature and other disciplines, English 493, Comparative Literature 594, 595, or approved sections of special topics courses.

Science disciplines, one course from each group:

1. A course in technical writing: Rhetoric and Writing Studies 503W*.
2. A course in Shakespeare or Bible as Literature: English 302, 405, 533.
3. A course in literature and psychology, literature and film, modern American fiction, or children's literature: English 301, 491, 493, 494, 501, 502, or approved sections of other special topics courses.
4. A course in literary history: English 560A, 560B, any course in the 520, 530, or 540 series, Comparative Literature 511, 512, 513, 514.

* Additional prerequisites required.

For students whose needs are not accommodated by any of the above patterns:

Students whose majors are not represented by the patterns above, students who wish to design a minor more directly tailored to their specific major, or students who otherwise feel they have special needs are encouraged to consult with their advisers in both major and minor departments to design individualized minors in English. All such minors must have the written approval of both departmental advisers.

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 Certificate

This certificate attests that the student has successfully completed 18 units (minimum GPA 3.0) of planned, advised, coherent, and articulated study in the field of literature for children. Prerequisites include admission to the University and to upper division or graduate standing. The Certificate in Children's Literature may be earned with a specialization either in Education or in English and Comparative Literature. Nine units in the certificate program may be counted toward the major in English, and six units may be counted toward the minor in English.

Specialization in Education. Nine units from courses in group A, six units from group B, and three units of an appropriate elective chosen with the approval of a faculty adviser.

Specialization in English and Comparative Literature. Nine units from courses in group B, six units from group A, and three units of an appropriate elective chosen with the approval of a faculty adviser.

Group A, Education: Educational Technology 596; Teacher Education 496**, 530.

Group B, English and Comparative Literature: Comparative Literature 561 (when offered as European Children's Literature); English 496**, 501, 502, 526**, 527**, 528**, 549**.

** With adviser's permission when the subject is closely related to children's literature.

Courses

LOWER DIVISION COURSES

220. Introduction to Literature (3) I, II

An inquiry into the basic nature of literature. What prompts human-kind to the creation of imaginative literature? What purposes does literature serve in the 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 the focus will be on practical criticism for the nonspecialist. Specific works studied will be representative of several genres, cultures, and periods of literature.

250A-250B. American Literature (3-3) (250A: CAN ENGL 14)

American literature from the colonial period to the present. Semester I: from the beginning to the Civil War. Semester II: Civil War to the present. Recommended for English majors.

260A-260B. English Literature (3-3) I, II (260A + 260B: CAN ENGL SEQ B) (260A: CAN ENGL 8) (260B: CAN ENGL 10)

English literature from the Anglo-Saxon period to the present, with emphasis on the major works in the literary tradition. Semester I: Ends with the neoclassical period. Semester II: Begins with the Romantic writers.

280. Introduction to Creative Writing (3) I, II

Prerequisite: Africana Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100 or Rhetoric and Writing Studies 100.

Theory and practice of poetry and fiction, with emphasis on basic concepts and techniques. A research paper on a writer, a technique, a period, or a genre required.

281. Creative Writing: Selected Genres (3)

Prerequisite: Rhetoric and Writing Studies 100.

Guidance and extensive practice in writing in one or more of the major genres: poetry, drama, fiction, or the essay. See Class Schedule for specific content.

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)

301. The Psychological Novel (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations 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.

302. Introducing Shakespeare (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations 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.

306A-306W. Children's Literature and Advanced Composition (3-3) I, II

Prerequisites: Rhetoric and Writing Studies 200. English 306A and 306W must be taken concurrently. Satisfies University Upper Division Writing requirement for students who have completed 60 units, fulfilled the Writing Competency requirement, and completed the General Education requirement in Communication and Critical Thinking. **Proof of completion of prerequisites required:** Test scores or verification of exemption; copy of transcript.

306A: Reading, analysis, and discussion of classic works of children's literature.

306W: Advanced composition; improvement of student skills through writing assignments based upon reading and work in the lecture part. Primarily designed to meet Upper Division Writing and Literature requirements for Liberal Studies-Emphasis in Education, but also open to students with other majors.

405. The Bible as Literature (3) I, II

(Same course as Comparative Literature 405.)

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

Prose and poetry of the King James version.

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.

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.

494. Modern American Fiction (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations 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.

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.

499. Special Study (1-3) I, II

Prerequisites: Consent of instructor and approval of department chair.

Individual study. Maximum credit six units.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

Prerequisite for all 500-level courses: Six lower division units in courses in literature and/or creative writing.

501. Literature for Children (3) I, II

Critical analysis of literature intended for children. Study of texts and illustrations.

502. Adolescence in Literature (3)

Prerequisite: Six units in literature.

Works centrally concerned with an adolescent protagonist. Includes both traditional novels of development (Bildungsroman) and contemporary young adult novels.

508W. The Writing of Criticism (3) I, II

Prerequisites: Satisfies University Upper Division Writing requirement for students who have completed 60 units, fulfilled the Writing Competency requirement, and completed the General Education requirement in Communication and Critical Thinking. **Proof of completion of prerequisites required:** Test scores or verification of exemption; copy of transcript.

Theory and practice of literary criticism. Emphasis on the work of important critics and on development of student's own critical writing.

510. Teaching Literature (3)

Prerequisite: Six units in 500-level literature courses.

Theory and practice of teaching literature in high schools, colleges, and universities; various critical approaches (such as feminist, new historical, deconstruction, reader response) to literature and their implications for teaching and developing teaching styles.

519. American Ethnic Literatures (3) I, II

Prerequisite: Six units in literature.

Works from American ethnic literatures, with emphasis on formerly excluded traditions as African-American, Hispanic and Chicano, Asian-American, and American Indian.

520. African-American Literary Tradition (3)

Prerequisite: Six units in literature.

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.

522. American Literature, 1800-1860 (3) I, II

Representative works by American writers from 1800 to 1860; likely to include works by Emerson, Hawthorne, Melville, Poe, Stowe, Thoreau, Whitman, and others.

523. American Literature, 1860-1920 (3) I, II

Representative works by American writers from 1860 to 1920; likely to include works by Charles Chesnut, Kate Chopin, Stephen Crane, Emily Dickinson, Henry James, Mark Twain, Edith Wharton, and others.

524. American Literature, 1920-1950 (3) I, II

Representative works by American writers from 1920 to 1950; 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.

525. American Literature, 1950 to Present (3) I, II

American writers from 1950 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.

526. Topics in American Literature (3)

Topics in American literature to include the literature of the South, Black writers in America, the frontier and American literature, the outcast in American literature, the immigrant experience in American literature. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

527. Genre Studies in American Literature (3)

Study of a specific literary genre: overview of the genre's development in American literature (the American novel, the American short story, American poetry) or focus on a narrower period (the modern American novel, the contemporary American novel, American autobiographies, others). May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

528. Individual American Authors (3)

Works of a major American author or, if useful comparisons and juxtapositions warrant it, the works of two or three authors: Melville, Twain, James, Faulkner, Steinbeck, Cather, Morrison; or Pound and Eliot, Emerson and Thoreau, Vonnegut and Barth, Rich and Levertov, and others. See Class Schedule for specific content. May be repeated with new title and content. Maximum credit six units.

530. Chaucer (3)

Chaucer's works, with emphasis on *The Canterbury Tales* and *Troilus and Criseyde*.

531. Renaissance Literature (3)

English poetry and prose from 1485 to 1603.

533. Shakespeare (3) I, II

An introduction to the writings of Shakespeare. This course cannot be used in place of English 302 to satisfy General Education requirements.

534. Study of Shakespeare (3)

Prerequisite: English 533.

Advanced study of Shakespeare's achievement as a poet and playwright.

536. Seventeenth Century Literature (3)

English poetry and prose from 1603 to 1660.

537. Milton (3)

Milton's writings, with emphasis on *Paradise Lost*.

538A-538B. Restoration and Eighteenth Century Literature (3-3)

English literature in the neoclassical era. Semester I: Dryden, Swift, Pope, and their contemporaries. Semester II: Writers of the middle and late eighteenth century.

540A-540B. English Fiction (3-3)

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.

541A-541B. English Drama (3-3)

English dramatic literature from its beginnings to the nineteenth century. Semester I: The period from the beginning to 1642. Semester II: The period following reopening of the theatres in 1660.

542. Romantic Literature (3)

Representative British works from the 1790s to the 1830s by such writers as Wollstonecraft, Blake, Wordsworth, Coleridge, Byron, Shelley, Keats, Austen, and Scott.

543. Victorian Literature (3)

Representative British works from 1837 to 1890 by such writers as Carlyle, Tennyson, Ruskin, Browning, Dickens, Arnold, Eliot, and Pater.

544. British Literature, 1890-1918 (3)

Representative British works from 1890 to 1918 by such writers as Hardy, Gissing, Shaw, Conrad, Yeats, Wells, Forster, Mansfield, and the World War I poets.

547. British Literature, 1918-1950 (3)

Representative British works from 1918 to 1950 by such writers as Joyce, Woolf, Lawrence, T. S. Eliot, Mansfield, Huxley, Bowen, Greene, Auden, Orwell, and Thomas.

548. British Literature, 1950 to Present (3)

Representative British works from 1950 to the present by such writers as Golding, Amis, Murdoch, Lessing, Pinter, Hughes, Fowles, Stoppard, Drabble, and Ishiguro.

549. Topics in English Literature (3)

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.

560A. British Literature, Beginnings Through the Eighteenth Century (3) I, II

Survey of major British writers, with emphasis on reading of complete works. From the beginnings to the neoclassical period. Especially appropriate for those who will teach British literature, and for those proceeding on to graduate study.

560B. British Literature, Romanticism to the Present (3) I, II

Survey of major British writers, with emphasis on reading of complete works. Begins with the Romantic writers. Especially appropriate for those who will teach British literature, and for those proceeding on to graduate study.

570. Techniques of Poetry (3)

Prerequisite: English 280.

Techniques of poetry from the creative writer's point of view. Introduction to critical and theoretical literature on poetry. Includes a creative writing workshop.

571. Techniques of the Short Story (3)

Prerequisite: 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.

573. Techniques of the Novel (3)

Prerequisite: 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.

576. Literary Editing and Publishing (3)

Prerequisite: English 280.

Principles and practices of editing and literary publishing. Workshop on small press publishing. Includes editing and publishing workshop.

577. Techniques of Screenwriting (3)

Prerequisite: English 280 or Television, Film, and New Media 110 or 410 for television, film, and new media majors.

Techniques of screenwriting. Introduction to critical and theoretical literature on screenwriting. Includes a creative writing workshop.

579. Topics in Creative Writing (3)

Prerequisite: 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.

580. Writing of Poetry (3) I, II

Prerequisite: English 570.

A creative writing workshop in poetry. Continuation of English 570. Maximum credit six units.

581W. Writing of Fiction (3) I, II

Prerequisites: English 280. Satisfies University Upper Division Writing requirement for students who have completed 60 units, fulfilled the Writing Competency requirement, and completed the General Education requirement in Communication and Critical Thinking. **Proof of completion of prerequisites required:** Test scores or verification of exemption; copy of transcript.

A creative writing workshop in fiction. Continuation of English 571. Maximum credit six units.

583. Writing Long Narrative (3)

Prerequisite: English 573.

A creative writing workshop in long narrative, especially the novella or novel. Continuation of English 573. Maximum credit six units.

584W. Writing Informal Essays (3) I, II

Prerequisites: English 280. Satisfies University Upper Division Writing requirement for students who have completed 60 units, fulfilled the Writing Competency requirement, and completed the General Education requirement in Communication and Critical Thinking. **Proof of completion of prerequisites required:** Test scores or verification of exemption; copy of transcript.

A creative writing workshop in nonfiction, especially the essay as an art form. Maximum credit six units.

587. Writing the Screenplay (3)

Prerequisite: English 577 or Television, Film, and New Media 110 or 410 for television, film, and new media majors.

A creative writing workshop in screenwriting with emphasis on the feature film. Continuation of English 577. Includes playwriting and revising a television script or short film. Maximum credit six units.

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 or master's degree. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

Comparative Literature

(See this section of catalog under Comparative Literature.)

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

European Studies

Refer to "Humanities" in this section of the catalog.

Exercise and Nutritional Sciences

In the College of Professional Studies and Fine Arts

OFFICE: Exercise and Nutritional
Sciences 351

Faculty

Emeritus: Andrus, Barone, Benton, Broadbent, Carter, Cave, Cullen, Fox, Friedman, Grawunder, Gutowski, Kasch, King, Landis, Olsen, L., Phillips, Schwob, Sleet, Smith, Tollefsen, Wells, Whitby, Wilhelm, Williamson, Ziegenfuss

Chair: Carlson

Professors: Aufmesser, Buono, Carlson, Francis, P., McKenzie, T., Mechikoff, Moore, Nichols-Bernhard, Patterson, Rushall, Selder, Simmons, Sucec, Verity

Associate Professors: Franz, Kolkhorst

Assistant Professors: Knop, LaMaster, Quinn, Wiksten

Lecturers: Francis, L., McKenzie, R., Voigt, Yaggie

Offered by the Department

Master of Arts degree in physical education.

Master of Science degree in exercise physiology.

Major in kinesiology with the B.S. degree in applied arts and sciences.

Emphasis in athletic training.

Emphasis in fitness, nutrition, and health.

Emphasis in physical education.

Emphasis in prephysical therapy.

Adapted physical education credential.

Minor in physical education.

The Major

Kinesiology is 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.

The degree name was changed to kinesiology to better reflect the diversity of subject matter and breadth of career opportunities available to today's students. Some of the typical fields open to kinesiology majors include:

Athletic Training. The purpose of this emphasis is to prepare students to meet the academic requirements necessary for a career in athletic training and completion of the degree requirements for national certification in athletic training. Athletic training specialists work in such diverse areas as injury prevention and rehabilitation, fitness testing, and as athletic trainers for sports teams. Students who want to meet all requirements for national certification by the National Athletic Trainers Association must also complete a minimum two year clinical internship under the direct supervision of a certified athletic trainer. Students interested in completing an internship should meet with the undergraduate adviser in the department. Selection is competitive and limited in number. Applications are accepted in spring for fall selections.

Note: Effective October 31, 2001, no student can begin a clinical experience through an internship program. Effective on January 1, 2004, only students who have graduated from an National Athletic Training Association (NATA) accredited school are eligible to take the NATA certification examination. While San Diego State University is seeking accredited status, SDSU is not an accredited program at this time. No assurance can be given that accreditation will be received by that date.

Fitness, Nutrition, and Health. Persons pursuing this 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 program exercises for apparently healthy persons in diverse fitness and health settings, and (2) pursue certifications that reflect knowledge of the scientific principles that govern leadership in exercise and health enhancement programs. Graduates work as fitness experts and managers in adult and corporate fitness programs of business, industry, public agencies, and schools. There are also career opportunities for employment in the business sector to include fitness clubs, cardiac rehabilitation, and human efficiency research.

Physical Education. The graduate in kinesiology may find employment in public and private schools, specializing at either the elementary or secondary level. Kinesiology majors teach activities and sports skills, health and fitness classes, and act as physical education resource specialists. Students may also prepare for careers in athletic coaching. Opportunities for both men and women exist at the inter-scholastic level as well as with community and commercial sports clubs.

Prephysical Therapy. This emphasis prepares students to meet the academic requirements necessary for entry to postgraduate education for physical therapy, chiropractor, occupational therapy, physician assistant, and podiatry. Students find employment in a broad range of medical, commercial, and educational 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.

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."

A minor is not required with this major except for the Emphasis in Physical Education, which requires completion of 12 units towards a minor or supplementary authorization.

Emphasis in Athletic Training

Preparation for the Major. Exercise and Nutritional Sciences activities (2 units), Exercise and Nutritional Sciences 104A or 104B, 210, 265, 265L; Biology 202, 212; Chemistry 130, 200; Communication 103; Information and Decision Systems 180; Nutrition 204; Physics 180A, 180B; Psychology 101; Sociology 101; and one of the following: Biology 215, Economics 201, Psychology 270, Sociology 201, or Statistics 119. (47 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 49 upper division units to include Exercise and Nutritional Sciences 301, 302, 303, 304, 305, 306, 307, 314, 363, 365, 367, 367L, 368, 368L, 388 (1 unit), 401A, 401B, 461, 462, 463, 463L; Biology 336. Biology 336 will also satisfy three units of the General Education requirement in IV.A. Recommended: Students should take Sociology 355 to satisfy the General Education requirement in IV.B.

Emphasis in Fitness, Nutrition, and Health

Preparation for the Major. Exercise and Nutritional Sciences activities (2 units), Exercise and Nutritional Sciences 104A or 104B, 210, 265, 265L; Biology 100, 100L, 212; Chemistry 100; Communication 103; Nutrition 202; Psychology 101; Sociology 101; and three units selected from Biology 215, Economics 201, Psychology 270, Sociology 201, or Statistics 119. (34 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 48 upper division units to include Exercise and Nutritional Sciences 301, 302, 303, 304, 305, 306, 307, 314, 347A, 347B, 363, 388 (1 unit), 401A, 401B, 412, 431, 432, 432L, 433; Biology 336; Nutrition 309, 311; Biology 336 will also satisfy three units of the General Education requirement (IV.A). Recommended: Students should take Sociology 355 to satisfy the General Education requirement (IV.B).

Emphasis in Physical Education

This program must be elected by students who wish to be a candidate for a single subject teaching credential at San Diego State University.

All requirements as outlined in this section and the sections titled Policy Studies in Language and Cross-Cultural Education or Teacher Education in this catalog must be completed.

This major may be used by students in policy studies or teacher education as an undergraduate major for the B.S. degree in applied arts and sciences.

Completion of 12 units towards a minor or supplementary authorization is required. In conjunction with the department undergraduate adviser, the student must determine a specific course of study to establish a formal program for supplementary authorization or minor. The program must be filed with the Office of Admissions and Records.

Preparation for the Major. Exercise and Nutritional Sciences 210, 265, 265L; Biology 212; Communication 103; Psychology 101; Sociology 101; and one of the following: Biology 215, Economics 201, Psychology 270, Sociology 201, or Statistics 119. (20 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 51 upper division units to include Exercise and Nutritional Sciences 301, 302, 303, 304, 305, 306, 307, 314, 335, 341, 347A, 347B, 348, 351, 401A, 401B, 441A, 441B, 441C, 442A, 442B, 445; Biology 336. Biology 336 will also satisfy three units of the General Education requirement (IV.A.). Recommended: Students should take Sociology 355 to satisfy the General Education requirement (IV.B.).

Emphasis in Prephysical Therapy

Preparation for the Major. Exercise and Nutritional Sciences 104A or 104B, 210, 265, 265L; Biology 202, 210, 212; Chemistry 200, 201; Communication 103; Physics 180A, 180B, 182A, 182B; Psychology 101; Sociology 101; and one of the following: Biology 215, Economics 201, Psychology 270, Sociology 201, or Statistics 119. (47 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 40 upper division units to include Exercise and Nutritional Sciences 301, 302, 303, 304, 305, 306, 307, 314, 363, 365, 388 (1 unit), 401A, 401B, 460; Biology 336, 436, Psychology 350. Biology 336 will also satisfy three units of the General Education

requirement (IV.A.). Recommended: Students should take Sociology 355 to satisfy the General Education requirement (IV.B.).

Adapted Physical Education Credential*

(Credential Code: 00980)

Admission Categories

Level I: Kinesiology major with an interest in adapted physical education, completion of a minimum of 45 units with a GPA of 2.5 or better, and official application to the coordinator of adapted physical education.

Level II: Kinesiology major with a minimum of 2.75 after 90 units including the completion of Exercise and Nutritional Sciences 301, 303, 304, 348, 363 and at least one unit of Exercise and Nutritional Sciences 388, 135 hours of practicum in school and community settings, and official application to the coordinator of adapted physical education.

Level III: Certified. Completion of all courses required for kinesiology major in the single subject teaching credential major, all classes for the certification including completion of the entire student teaching experience. (Preliminary credential.) The student must have a 3.0 average and no grade lower than C in all the academic classes required to be certified. A required course in which a grade lower than C is earned may be repeated only with prior approval of the coordinator.

Pre-Service Program

Candidates for this program in adapted physical education must complete the requirements for the single subject teaching credential in physical education, apply for the program, be accepted, and complete the following specialist coursework.

1. Adapted Program: Minimum 16 units. Exercise and Nutritional Sciences 348, 363, 398** (1 unit), 667, 672, and Special Education 501.
2. Practical Experience and Student Teaching: The candidate must complete one unit of Exercise and Nutritional Sciences 388, 135 hours of practicum in school and community settings, and a full-time student teaching experience in adapted physical education.

In-Service Program

Candidates for this program in adapted physical education must complete the requirements for the single subject teaching credential in physical education, apply for the program, be accepted, and complete the following specialist coursework.

1. Adapted Program: Minimum of 16 units. Exercise and Nutritional Sciences 348, 363, 398** (1 unit), 667, 672, and 684.
2. Practical Experience and Student Teaching: The candidate must complete one unit of Exercise and Nutritional Sciences 388, 135 hours of practicum in school and community settings, and a full-time student teaching experience in adapted physical education or equivalent experience.

* Additional prerequisites required for this credential.

** Approved by Coordinator, Adapted Physical Education.

Physical Education Minor

Coaching: The coaching of athletic teams is an integral part of the field of physical education. The physical education minor has been created for the purpose of allowing undergraduate students to study the scientific and technical bases of sport coaching. Completion of the minor will provide students with the qualifications for coaching in public and private schools, community athletic/sport programs, club sport programs, or other areas where coaching knowledge and experience is needed.

Psychology 101 is prerequisite to the minor and should be taken to satisfy General Education. Requirements for the minor are a minimum of 24 units to include Exercise and Nutritional Sciences 210, 265, 265L, 301, 307, 351, 352 or 353 (2 units), 398 (3 units), Biology 212,

Psychology 101; and one of the following: Biology 215, Economics 201, Psychology 270, Sociology 201, or Statistics 119.

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.

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

LOWER DIVISION COURSES

Courses offered for one unit credit meet two hours per week or equivalent. "A" signifies a beginning class, "B" intermediate.

Dance activity courses: Ballroom Dance, Folk Dance, Ballet, Jazz Dance, Modern Dance. Refer to "Dance" in this section of the catalog.

100. Exercise and Health (3) I, II

Two lectures and two hours of activity.

Scientific bases of relationships between exercise and health and application of these principles to individual fitness appraisal and regimen. (Formerly numbered Physical Education 100.)

102. Conditioning (1) I, II

(Formerly numbered Physical Education 102 and 102A.)

104A-104B. Weight Training (1-1) I, II, S

(Formerly numbered Physical Education 104A-104B.)

105. Individual Adaptives (1) I, II

Prerequisite: Consent of instructor.

A health history record is required of each student.

Individual exercise programs for those who are handicapped in some respect, or who have functional defects or deficiencies amenable to improvement through exercise. May be repeated for credit. (Formerly numbered Physical Education 105.)

108A-108B. Basketball (1-1) I, II

(Formerly numbered Physical Education 108A-108B.)

109A-109B. Soccer (1-1) I, II

(Formerly numbered Physical Education 109A-109B.)

110A-110B. Volleyball (1-1) I, II

(Formerly numbered Physical Education 110A-110B.)

111A-111B. Softball (1-1) I, II

(Formerly numbered Physical Education 111A-111B.)

115A. Track and Field (1) I, II

(Formerly numbered Physical Education 115A.)

116A-116B. Golf (1-1) I, II

(Formerly numbered Physical Education 116A-116B.)

118A-118B. Tennis (1-1) I, II, S

(Formerly numbered Physical Education 118A-118B.)

119A-119B. Bowling (1-1) I, II

(Formerly numbered Physical Education 119A-119B.)

120A-120B. Badminton (1-1) I, II

(Formerly numbered Physical Education 120A-120B.)

123A-123B. Racquetball (1-1) I, II, S

(Formerly numbered Physical Education 123A-123B.)

124. Sailing (1)

(Formerly numbered Physical Education 124.)

125. Men's Gymnastics Apparatus (1)

(Formerly numbered Physical Education 125.)

127A-127B. Women's Gymnastics Apparatus (1-1) I, II

(Formerly numbered Physical Education 127A-127B.)

129A-129B. Swimming (1-1) I, II, S

(Formerly numbered Physical Education 129A-129B.)

130. Step Training (1) I, II, S

(Formerly numbered Physical Education 130.)

137A. Aerobic Dance (1) I, II, S

(Formerly numbered Physical Education 137A.)

138. Selected Activities (1) I, II, S

May be repeated with new activity for additional credit. See Class Schedule for specific content. (Formerly numbered Physical Education 138.)

141A-141B. Martial Arts (1-1) I, II

Exercise and Nutritional Sciences 141A is prerequisite to 141B. (Formerly numbered Physical Education 141A-141B.)

145. Waterskiing (1) I, II, S

(Formerly numbered Physical Education 145.)

146. Surfing (1) I, II, S

(Formerly numbered Physical Education 146.)

147. Windsurfing (1) I, II, S

(Formerly numbered Physical Education 147.)

210. Introduction to Kinesiology (2) I, II

Overview of discipline of kinesiology. Development of a basic philosophy and background for entering profession. (Formerly numbered Physical Education 210.)

241A. Physical Education of Children—Theory (1) I, II, S

Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 241B.

Physical education of elementary school-aged children: Theoretical and scientific bases. Not open to physical education majors. (Formerly numbered Physical Education 241A.)

241B. Physical Education of Children—Activities (1) I, II, S

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 physical education majors. (Formerly numbered Physical Education 241B.)

265. Techniques in Athletic Training (1) I, II

Prerequisite: Biology 212.

Athletic training techniques and emergency field care of athletic injuries. Theory and techniques of basic athletic first aid, emergency procedures including CPR, bandaging and taping. (Formerly numbered Physical Education 265.)

265L. Techniques in Athletic Training Laboratory (1) I, II

Three hours of laboratory.

Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 265. (Formerly numbered Physical Education 265L.)

296. Experimental Topics (1-4) I, II, S

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)**

301. Physical Growth and Development (3) I, II

Prerequisite: Exercise and Nutritional Sciences 210.

Principles of human growth; performance as affected by developmental levels and individual differences in structure and function. (Formerly numbered Physical Education 301.)

302. History and Philosophy: Physical Activity and Sport (3) I, II

Prerequisite: Exercise and Nutritional Sciences 210.

Integrated approach to understanding of historical, philosophical, and sociological forces shaping development of physical activity and sport. (Formerly numbered Physical Education 302.)

303. Applied Kinesiology (3) I, II

Prerequisites: Grade of C or better in Biology 212 and Exercise and Nutritional Sciences 210 or Dance 181. **Proof of completion of prerequisites required:** Copy of transcript.

Arthrology, syndesmology and myology, with emphasis on movement analysis. Muscle groups and their functional relationships. Application of simple mechanical principles to movement analysis. (Formerly numbered Physical Education 303.)

304. Physiology of Exercise (3) I, II

Prerequisites: Grade of C or better in Exercise and Nutritional Sciences 210 or Nutrition 101, and Biology 336. **Proof of completion of prerequisites required:** Copy of transcript.

Effects of physical activities on physiological functions of the body. (Formerly numbered Physical Education 304.)

305. Measurement and Evaluation in Kinesiology (3) I, II

Prerequisites: Exercise and Nutritional Sciences 210 and one of the following: Biology 215, Economics 201, Psychology 270, Sociology 201, or Statistics 119.

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. (Formerly numbered Physical Education 305.)

306. Biomechanics of Human Movement (3) I, II

Prerequisite: Exercise and Nutritional Sciences 303.

Mechanical principles as applied to movement; analysis and application to selected motor skills. (Formerly numbered Physical Education 306.)

307. Motor Learning and Performance (3) I, II

Prerequisites: Exercise and Nutritional Sciences 210, Psychology 101, and one of the following: Biology 215, Economics 201, Psychology 270, Sociology 201, or Statistics 119.

Psychological parameters related to physical performance and the acquisition of motor skills. (Formerly numbered Physical Education 307.)

314. Exercise Physiology Laboratory (1) I, II

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. (Formerly numbered Physical Education 314 and 362.)

320. Skin and Scuba Diving (2)

Prerequisites: Medical examination, waiver for hazardous procedures, pass swimming competency test. Concurrent registration in Exercise and Nutritional Sciences 320L.

Function and knowledge of underwater diving to include diving physiology, hyperbaric conditions, medical hazards, safety procedures associated with scuba diving, proper care and operation of equipment. Not open to students with credit in Exercise and Nutritional Sciences 323, 324, Biology 460, Oceanography 305, 306. (Formerly numbered Physical Education 320.)

320L. Skin and Scuba Diving Laboratory (1)

Three hours of laboratory.

Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 320. (Formerly numbered Physical Education 320L.)

323. Advanced Scuba Diving (2)

Prerequisites: Exercise and Nutritional Sciences 320 or Openwater Scuba Certification, medical examination, and acceptable openwater diving equipment. Concurrent registration in Exercise and Nutritional Sciences 323L.

Theory, skills, and technique including underwater navigation, diving physics, diving physiology, diving medicine, diving safety. Qualifies for Advanced Diving Certificate from the National Association of Underwater Instructors. Not open to students with credit in Exercise and Nutritional Sciences 324, Biology 460, Oceanography 306.

323L. Advanced Scuba Diving Laboratory (1)

Three hours of laboratory.

Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 323.

324. Assistant Scuba Instructor (2)

Prerequisites: Exercise and Nutritional Sciences 323 or Oceanography 306, Master Diver Certification, medical examination, and acceptable openwater diving equipment. Concurrent registration in Exercise and Nutritional Sciences 324L.

Qualifies for Assistant Scuba Instructor Certificate from the National Association of Underwater Instructors. (Formerly numbered Physical Education 324.)

324L. Assistant Scuba Instructor Laboratory (1)

Three hours of laboratory.

Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 324. (Formerly numbered Physical Education 324L.)

335. Basic Movement Skills (2) I, II

Prerequisite: Credit or concurrent registration in Exercise and Nutritional Sciences 303.

Philosophy and practical application of educational gymnastics and dance; selection of music and step patterns needed for aerobic dance activities that are appropriate for primary school children. (Formerly numbered Physical Education 335.)

341. Skill Competency in Physical Education (2) Cr/NC I, II

Four hours of activity.

Prerequisite: Credit or concurrent registration in Exercise and Nutritional Sciences 303.

Demonstrated skill and knowledge competencies in badminton, basketball, outdoor experience, physical fitness, self-defense, soccer, softball, swimming, tennis, volleyball, and one of the following: archery, dance, golf, gymnastics, football, racquetball and wrestling. (Formerly numbered Physical Education 341.)

347A. Leadership for Kinesiology (2) I, II

Prerequisites: Exercise and Nutritional Sciences 301, 303, 305. Concurrent registration in Exercise and Nutritional Sciences 347B.

Theory and development of leadership behavior of physical educators, emphasizing leadership qualities unique to diverse physical activity settings. (Formerly numbered Physical Education 347A.)

347B. Leadership for Kinesiology Activity (1) I, II

Two hours of activity.

Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 347A.

(Formerly numbered Physical Education 347B.)

348. Special Physical Education (3) I, II

Prerequisites: Exercise and Nutritional Sciences 347A, 347B, and Psychology 101.

Etiologies, characteristics, education programs, and activities for individuals with non-physical disabilities (e.g. mentally retarded, learning disabled, etc.) (Formerly numbered Physical Education 348.)

351. Basic Coaching Theory (2) I

Prerequisites: Exercise and Nutritional Sciences 210, 265 and 265L. Basic principles of coaching and conditioning for various sports. Defining actual physical and mental demands of a competitive activity. Coaching decisions concerning design of physical training programs for high school and club programs. (Formerly numbered Physical Education 351.)

352. Theory and Analysis of Coaching Competitive Sports (2) I, II
Mechanical analysis, tactics, and strategy, scouting, officiating, and rules and daily-seasonal practice planning in one of the sports listed below.

- A. Basketball (Formerly numbered Physical Education 352A.)
- B. Football (Formerly numbered Physical Education 352B.)
- C. Baseball (Formerly numbered Physical Education 352C.)
- D. Track and Field (Formerly numbered Physical Education 352D.)
- E. Volleyball (Formerly numbered Physical Education 352E.)
- F. Additional sports (May be repeated with new content.) (Formerly numbered Physical Education 352F.)

353. Coaching Elite Athletes (2) II

Prerequisite: Exercise and Nutritional Sciences 351.

Psychological and leadership factors and actions that are necessary to produce the best training and competitive performances in serious athletes. (Formerly numbered Physical Education 331F, 332E and 353.)

363. Corrective Physical Education (3) I, II

Prerequisites: Exercise and Nutritional Sciences 303 and 304.

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. (Formerly numbered Physical Education 363.)

365. Scientific Management of Sports Injuries (3) I, II

Prerequisites: Exercise and Nutritional Sciences 265, 265L, 303, 304, 306.

Pathomechanics and pathophysiology of soft tissue and bone injury as it relates to the identification and management of sport related injuries. (Formerly numbered Physical Education 365.)

366. Clinical Evaluation of Sports Injuries (2) I, II

Prerequisites: Exercise and Nutritional Sciences 365. Concurrent registration in Exercise and Nutritional Sciences 366L.

Theoretical and practical experiences in the clinical evaluation of sports injuries with emphasis on techniques and procedures. (Formerly numbered Physical Education 366.)

366L. Clinical Evaluation of Sports Injuries Laboratory (1) I, II

Three hours of laboratory.

Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 366.

Theoretical and practical experiences in the clinical evaluation of sports injuries with emphasis on techniques and procedures. (Formerly numbered Physical Education 366L.)

367. Clinical Evaluation of Sports Injuries Part I (2) I

Prerequisite: Exercise and Nutritional Sciences 365.

Theory of clinical evaluation of sports injuries techniques and scientific basis of techniques. Principles of systematic differential evaluation of upper extremity, cervical spine. (Not open to students with credit in Exercise and Nutritional Sciences 366.)

367L. Clinical Evaluation of Sports Injuries Part I (1) I

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. (Not open to students with credit in Exercise and Nutritional Sciences 366L.)

368. Clinical Evaluation of Sports Injury Part II (2) II

Prerequisites: Exercise and Nutritional Sciences 367 and 367L.

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. (Not open to students with credit in Exercise and Nutritional Sciences 366.)

368L. Clinical Evaluation of Sports Injury Part II (1) II

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. (Not open to students with credit in Exercise and Nutritional Sciences 366L.)

388. Adapted Physical Education Laboratory (1-4) I, II, S

Three hours of laboratory per unit.

Prerequisite: Credit or concurrent registration in Exercise and Nutritional Sciences 348 or 363.

Supervised clinical experience working in the adapted physical education laboratory setting on campus with individuals with disabilities. Maximum credit four units. (Formerly numbered Physical Education 388.)

389. Practicum in Athletic Training (1-3) I, II

Three hours of laboratory per unit.

Prerequisites: Exercise and Nutritional Sciences 265 and 265L.

Practical training and clinical applications of basic and advanced techniques of athletic training and sports medicine. Athletic first aid, emergency procedures, bandaging, taping, use of physical therapy modalities, and application of therapeutic exercises to be performed in actual athletic medicine clinics. Maximum credit six units. (Formerly numbered Physical Education 389.)

397. Contemporary Topics in Kinesiology (Credit to be arranged) (Offered only in Extension)

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. (Formerly numbered Physical Education 397.)

398. Supervised Field Experience (1-3) Cr/NC I, II, S

Prerequisite: Consent of department chair.

Supervised practical experience in the area of kinesiology. Maximum credit six units. (Formerly numbered Physical Education 398.)

401A. Musculo-Skeletal Fitness (1) I, II

Prerequisites: Exercise and Nutritional Sciences 104A or 104B or 341; Exercise and Nutritional Sciences 304, 306, and 314. Concurrent registration in Exercise and Nutritional Sciences 401B.

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. (Formerly numbered Physical Education 401A.)

401B. Musculo-Skeletal Fitness Activity (1) I, II

Two hours of activity.

Prerequisites: Concurrent registration in Exercise and Nutritional Sciences 401A.

Circulorespiratory endurance, muscular strength and endurance, selection and care of equipment and facilities, and programs in the areas of flexibility, weight training and aerobics. (Formerly numbered Physical Education 401B.)

412. Leading Group Aerobic Exercise (1) I, II

Two hours of activity.

Prerequisites: Exercise and Nutritional Sciences 303, 304, 314.

Teaching group aerobic exercise including aerobic dance, step training, circuit training, and interval training. Students design and lead aerobic, strength, and flexibility segments of a group of aerobic exercise class. (Formerly numbered Physical Education 412.)

431. Administration of Exercise and Fitness Program (2) II

Prerequisites: Exercise and Nutritional Sciences 303, 304, 314.

Administration and management of corporate, private, university-based, and hospital-based exercise programs. (Formerly numbered Physical Education 431.)

432. Exercise, Fitness, and Health (2) I

Prerequisites: Exercise and Nutritional Sciences 303, 304, 305, 314, and Community Health Education 301. Concurrent registration in Exercise and Nutritional Sciences 432L.

Exercise testing, programming and leadership for healthy persons of different ages, capacities, and needs. (Formerly numbered Physical Education 432.)

432L. Exercise, Fitness, and Health (1) I

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. (Formerly numbered Physical Education 432L.)

433. Exercise, Sport, and Aging (3) I

Prerequisites: Exercise and Nutritional Sciences 301 and 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. (Formerly numbered Physical Education 433.)

441. Practicum: Physical Education Activities (2) I, II

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. Racquet Sports

Additional prerequisite: Exercise and Nutritional Sciences 341 (badminton and tennis only). (Formerly numbered Physical Education 441A.)

B. Indoor Sports

Additional prerequisite: Exercise and Nutritional Sciences 341 (basketball and volleyball only). (Formerly numbered Physical Education 441B.)

C. Field Games

Additional prerequisite: Exercise and Nutritional Sciences 341 (soccer and softball only). (Formerly numbered Physical Education 441C.)

D. Gymnastics

Additional prerequisite: Exercise and Nutritional Sciences 341 (gymnastics only). (Formerly numbered Physical Education 441D.)

442A. Physical Education for Elementary Schools (2) I, II

Prerequisites: Exercise and Nutritional Sciences 335, 347A and 347B.

Objectives, curricula, activities, and application of basic scientific principles for the conduct. (Formerly numbered Physical Education 442A.)

442B. Physical Education for Elementary Schools Activity (1) I, II

Two hours of activity.

Prerequisite: Concurrent registration in Exercise and Nutritional Sciences 442A.

(Formerly numbered Physical Education 442B.)

445. Organization and Administration of Physical Education (3) I, II

Two lectures and two hours of activity.

Prerequisite: Exercise and Nutritional Sciences 347A.

Organization of physical education programs in the public schools. Includes curriculum development, program content, legal bases, materials, facilities and constraints in the discipline of physical education. (Formerly numbered Physical Education 380 and 445.)

460. Professional Issues (1) Cr/NC I, II

Prerequisite: Senior standing in prephysical therapy specialization. Current issues relevant for one preparing to enter an allied health profession. (Formerly numbered Physical Education 460.)

461. Sport Psychology (3) I, II

Prerequisite: Exercise and Nutritional Sciences 307.

Psychological factors underlying behavior in sport and physical activity. Emphasis on personality and motivational factors. (Formerly numbered Physical Education 461.)

462. Therapeutic Modalities for Sports Injuries (3) I, II

Prerequisite: Exercise and Nutritional Sciences 365.

Theories and techniques for the design, implementation, evaluation, and application of rehabilitation modalities. (Formerly numbered Physical Education 462.)

463. Principles and Techniques in Therapeutic Exercise (2) I, II

Prerequisites: Exercise and Nutritional Sciences 365. Concurrent registration in Physical Education 463L.

Design and application of therapeutic exercise programs for athletic injuries. (Formerly numbered Physical Education 463.)

463L. Principles and Techniques in Therapeutic Exercise Laboratory (1) I, II

Three hours of laboratory.

Prerequisites: Exercise and Nutritional Sciences 365. Concurrent registration in Physical Education 463.

(Formerly numbered Physical Education 463L.)

464. Pathomechanics of Athletic Injuries (3) II

Prerequisite: Exercise and Nutritional Sciences 365.

Pathology and mechanics associated with common sports injuries. Signs and symptoms related to cause of injury. Common treatment and interventions. (Formerly numbered Physical Education 464.)

496. Experimental Topics (1-4) I, II

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.

499. Special Study (1-3) I, II, S

Prerequisite: Consent of department chair.

Individual study. Maximum credit six units.

UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)

585. Quantitative and Computer Methods in Kinesiology (2) I, II

Prerequisite: Biology 215, Economics 201, Psychology 270, Sociology 201, or Statistics 119.

Analysis of large physical education and exercise science data sets. Methods for understanding characteristics of data sets. (Formerly numbered Physical Education 585.)

586. Experimental Methods in Kinesiology (2) I, II

Prerequisite: Exercise and Nutritional Sciences 585.

Experimental methods and designs in research literature of kinesiology. (Formerly numbered Physical Education 586.)

596. Selected Topics in Exercise and Nutritional Sciences (1-3) I, II

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 or master's degree. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

Finance

In the College of Business Administration

OFFICE: Student Services 3356
TELEPHONE: (619) 594-5323
FAX: (619) 594-3272

A member of AACSB—The International Association for Management Education.

The Personal Financial Planning Certificate is registered with International Board of Certified Financial Planners.

Faculty

Emeritus: Fisher, Hippaka, Hungate, Hutchins, Nye, Reints, Schmier

Chair: Varaiya

Professors: Bost, Cherin, Do, Ely, Gitman, Haddad, Omberg, Salehizadeh, Short, Sterk, Vandenberg, Varaiya, Warschauer

Associate Professors: Block, Houston, Padmanabhan (IVC), Sachdeva, Song, Wilbur (Associate Dean and Director, Undergraduate Program)

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.

Teaching major in business for the single subject teaching credential.

Minor in finance.

Minor in real estate.

Certificate in personal financial planning.

Admission to the Major

The undergraduate business administration program at San Diego State University is structured such that students desiring a business administration major are first admitted to the prebusiness administration major for their first two years of university work. During these first two years students should complete general education courses and a common core of nine lower division preparation for the business major courses – Accountancy 201, Financial Accounting Fundamentals; 202, Managerial Accounting Fundamentals; Finance 140, Legal Environment of Business; Economics 101, Principles of Economics (Macro); Economics 102, Principles of Economics (Micro); Information and Decision Systems 180, Principles of Information Systems; Information and Decision Systems 290, Business Communication (not required for accounting majors); Mathematics 120, Calculus for Business Analysis; and Statistics 119, Elementary Statistics for Business. These prerequisite courses may not be taken Cr/NC; the minimum grade in each class is C. All students must have fulfilled the SDSU Mathematics Competency and SDSU Writing Competency requirements and have completed 56 college units.

Supplemental admissions criteria must be met before students may declare an upper division major and be eligible for upper division courses. For current information concerning admissions criteria and procedures, contact the Business Undergraduate Program Office (BA 448).

Business administration majors may not complete a minor in the College of Business Administration.

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 comput-

ers 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.

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—The International Association for Management Education accredited program. Exceptions require thorough documentation evidencing the above standards.

The Majors

The Finance Department offers three majors: Finance, Financial Services, and Real Estate. The finance major is broadest and may include courses in all areas.

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 per-

sonal 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 major objective of the real estate program at SDSU is to prepare its graduates as well-rounded professionals with a specialty in the multifaceted field of real estate and land market analysis. The changing nature of today's real estate market requires that graduates from university real estate programs receive a complete and broad approach to this field. Graduates with a major in real estate should be capable of making a wide variety of management decisions concerning real estate and related land resources. This includes the ability to utilize new economic concepts, understand changing social concerns, and apply up-to-date analytical tools such as computers to the process of real estate decision making. SDSU's program in real estate provides students with analytical skills, technical competence to perform market analyses, and a better understanding of the tools necessary to perform in today's complex real estate and land markets. This is in addition to the conventional knowledge required for a license. 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.

With more than two billion acres of land in the United States, important public and private decisions must be made every day about the use, management, and disposition of this vast real estate acreage. This means job opportunities for the real estate major are created in a variety of areas such as valuation, development, financing, brokerage, market analysis, and public regulation. Job opportunities in real estate may also exist even in times of economic uncertainty. For example, during recent times many enterprises, large and small, have turned their attention to maximizing returns generated by their often extensive real estate holdings. This has created a demand for a new real estate expert—one who can manage asset disposition, value existing properties, upgrade underutilized property, and negotiate lease terms and conditions. In addition, the changing nature of the financial environment in which real estate markets must operate has created a demand for people not only with basic real estate training, but also with good general business and financial skills. SDSU's real estate program recognizes this changing real estate environment and prepares majors for these diverse opportunities.

Retention Policy

The College of Business Administration is concerned that each individual upper division student makes reasonable academic progress toward earning a degree. To this end, the College will counsel students who have earned less than a "C" (2.0) average each semester. Further, such students will be warned that continued poor performance may result in their removal from any business major.

Finance Major

With the B.S. Degree in Business Administration
(Major Code: 05041)

Preparation for the Major. Finance 140; Accountancy 201, 202; Economics 101, 102; Information and Decision Systems 180, 290; Mathematics 120 or 150; and Economics 201 or Statistics 119. (27-29 units)

These prerequisite courses may not be taken Cr/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.**

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. Forty-four upper division units consisting of Finance 321, 323, 325, 327, 423; Accountancy 325, 326; Economics 490; Information and Decision Systems 302; Management 350; Business Administration 404 or Management 405; Marketing 370; and six units selected from Finance 326, 329, 421, 425. A "C" (2.0) average is required in the courses stipulated here for the major.

Of the 128 units required for the degree, at least 60 units must be at the upper division level. This includes the 44 units listed above, nine units of upper division General Education, and at least seven units of upper division electives chosen from within or outside of Business Administration. Finance majors are encouraged to use these electives to explore another area such as Real Estate (Finance 331, 333, 335, 431, 433). A minimum of 64 units of coursework applicable to the bachelor's degree must be completed outside the areas of business administration, economics, and statistics. This means that at least six units of electives (upper or lower division) must be completed in areas other than business administration, economics, and statistics. A maximum of six lower division units of accountancy courses may be used to satisfy degree requirements.

Financial Services Major

With the B.S. Degree in Business Administration
(Major Code: 05043)

Preparation for the Major. Accountancy 201 and 202; Economics 101 and 102; Economics 201 or Statistics 119; Finance 140; Information and Decision Systems 180 and 290; Mathematics 120 or 150. (27-29 units)

These prerequisite courses may not be taken Cr/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.**

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. Forty to 41 upper division units consisting of Finance 323, 326, 327, 331, 521, 589; Accountancy 503; Information and Decision Systems 302; Management 350; Business Administration 404 or Management 405; Marketing 370; six to seven units selected from Finance 421, 425, 431, 435*, 445; Accountancy 326, 504; Economics 320 or 422, 490; and Marketing 377. A "C" (2.0) average is required in the courses stipulated here for the major.

Of the 128 units required for the degree, at least 60 units must be at the upper division level. This includes the 41 to 42 units listed above, nine units of upper division General Education, and at least 10 to 11 units of upper division electives chosen from within or outside of Business Administration. A minimum of 64 units of coursework applicable to the bachelor's degree must be completed outside the areas of business administration, economics, and statistics. This means that at least nine units of electives (upper or lower division) must be completed in areas other than business administration, economics, and statistics. A maximum of six lower division units of accountancy courses may be used to satisfy degree requirements.

*Prerequisite waived for this course.

Real Estate Major

With the B.S. Degree in Business Administration
(Major Code: 05111)

Preparation for the Major. Accountancy 201 and 202; Finance 140; Information and Decision Systems 180, 290; Economics 101 and 102; Economics 201 or Statistics 119; and Mathematics 120 or 150. (27-29 units)

These prerequisite courses may not be taken Cr/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.**

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. Thirty-nine to 40 upper division units consisting of Finance 323, 331, 335, 431 or 433, 435; Information and Decision Systems 302; Management 350; Business Administration 404 or Management 405; Marketing 370; Public Administration 320; and 9 to 10 additional units selected from Accountancy 503; Finance 333, 340, 431 or 433, 521; Marketing 373; Economics 422, 490; Geography 354, 559. A "C" (2.0) average is required in the courses stipulated here for the major.

Of the 128 units required for the degree, at least 60 units must be at the upper division level. This includes the 39-40 units listed above, nine units of upper division General Education, and at least 11-12 units of upper division electives, chosen from within or outside of Business Administration. A minimum of 64 units of coursework applicable to the bachelor's degree must be completed outside the areas of business administration, economics, and statistics. This means that at least six units of electives (upper or lower division) must be completed in areas other than business administration, economics, and statistics. A maximum of six lower division units of accountancy courses may be used to satisfy degree requirements.

Business Major

In preparation for the Single Subject Teaching Credential With the B.S. Degree in Business Administration

All candidates for the single subject teaching credential in business must complete all requirements for the applicable specialization as outlined in this section of the catalog under Policy Studies or Teacher Education. Students must complete the requirements of a major in one of the five departments within the College of Business Administration. In consultation with the single subject credential adviser in the College of Business Administration, undergraduate students must develop programs which fulfill the State credential requirements. All undergraduate majors must demonstrate office skills proficiency. Finance 589, Personal Financial Planning, is required of all teaching credential majors. Of the 128 units required for the degree, at least 60 units must be at the upper division level.

Student programs must be approved in advance by the College of Business Administration single subject credential adviser.

Finance Minor

The minor in finance consists of a minimum of 21 units to include Accountancy 201; Finance 321, 323, 326, 327, and 329; Statistics 119.

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 or in International Business may not complete a minor in the College of Business Administration.

Students must officially declare the minor before taking any upper division business courses. **Students must meet the prerequisites for the minor in effect at the time that they declare the minor.** The current prerequisites for admission to the finance minor include completion of the following courses with a grade of C or better: Economics 101, 102, and a three unit course in statistics (Statistics 119 is recommended); completion of the General Education requirements in Communication and Critical Thinking; completion of an additional nine units in the department of the student's major, including at least three units of upper division courses. Students must also meet the GPA requirement in effect at the time that they declare the minor. Contact the Business Undergraduate Program Office (BA 448) for admissions criteria and procedures.

Real Estate Minor

The minor in real estate consists of a minimum of 18 units to include Economics 102; Finance 140, 331, 335; and six units selected from Finance 333, 431, 433, and 435.

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 or in International Business may not complete a minor in the College of Business Administration.

Students must officially declare the minor before taking any upper division business courses. **Students must meet the prerequisites for the minor in effect at the time that they declare the minor.** The current prerequisites for admission to the real estate minor include completion of the following courses with a grade of C or better: Economics 101, 102, and a three unit course in statistics (Statistics 119 is recommended); completion of the General Education requirements in Communication and Critical Thinking; completion of an additional nine units in the department of the student's major, including at least three units of upper division courses. Students must also meet the GPA requirement in effect at the time that they declare the minor. Contact the Business Undergraduate Program Office (BA 448) for admissions criteria and procedures.

Personal Financial Planning Certificate

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 may take the courses on a space-available basis.

This certificate is a program registered with the Certified Financial Planner Board of Standards.

Prerequisites to the program include Finance 140; Accountancy 201; Economics 101, 102; and Statistics 119. (15 units.)

The certificate requires 22 units to include Accountancy 503, Finance 323, 327, 421, 445, 521, and 589. In order to qualify for this certificate a "C" (2.0) average in these 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 programmatically specified. Courses in the certificate may not be counted toward the minor.

Courses

LOWER DIVISION COURSE

140. Legal Environment of Business (3) I, II

Business legal system, sources of law, social and ethical influences, judicial and administrative systems, contracts, torts, bankruptcy, agency, business organizations, securities regulation, regulation of property, and protection of intellectual property interests.

UPPER DIVISION COURSES (Intended for Undergraduates)

321. Managerial Economics (3) I, II

Prerequisite: Approved upper division business major, business minor, or another major approved by the College of Business Administration.

Role of economic analysis in management decisions. Study of demand, cost, supply theories from a business viewpoint. Emphasis on managerial decision making.

323. Fundamentals of Finance (3) I, II

Prerequisite: Approved upper division business major, business minor, or another major approved by the College of Business Administration. **Proof of completion of prerequisite required:** Change of major form or other evidence of acceptable major code.

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.

325. Intermediate Finance (4) I, II

Prerequisite: Finance 323 with minimum grade of C.

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.

326. Financial Institutions Management (3)

Prerequisite: Finance 323 with minimum grade of C.

Management of financial institutions including savings and loan associations, mutual savings banks, credit unions, private pension plans, brokerage houses, investment companies, consumer credit institutions, federal credit agencies, and commercial banks. Emphasis on internal financial management of these institutions.

327. Investments (3) I, II

Prerequisite: Finance 323.

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.

329. International Business Finance (3) I, II

Prerequisite: Finance 323.

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.

331. Real Estate Essentials (3) I, II

Prerequisite: Completion of lower division course requirements in business major or minor.

Fundamental operations of the real estate market; principles of real property valuation, financing, law, investment, brokerage, management, and development.

333. Law of Real Property (3) I, II

Prerequisite: Finance 331.

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.

335. Land Markets and Real Estate Analysis (3) I, II

Prerequisite: Finance 331.

Theory and analysis of land utilization. Location analysis and determinants of land use patterns. Real estate market behavior and economic growth. Basic real estate investment analysis. Public controls and policies affecting land markets.

340. Advanced Business Law (3)

Prerequisites: Finance 140, approved upper division business major, business minor, or other approved major.

Law of contracts, sales, commercial paper, secured transactions, bankruptcy, suretyship, agency, organizations, property, insurance, trusts and estates, securities regulations, and professional liability.

421. Portfolio Management and Security Analysis (3)

Prerequisite: Finance 327.

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.

423. Financial Analysis and Management (4) I, II

Prerequisites: Finance 321 and 325. Strongly recommended: Accountancy 326.

Integration of various aspects of finance, application of financial theory. Financial decision making in the firm. Case study.

425. Business Forecasting (3)

Prerequisite: Finance 323.

Business fluctuations; forecasting, and related problems confronting the business firm; forecasting techniques; specific forecasts. The use of forecasts in the firm.

431. Real Estate Finance (3) I

Prerequisite: Finance 331.

Methods of financing real estate; sources of funds; governmental financial agencies; feasibility analysis for various types of properties.

433. Theory of Real Property Value (3) II

Prerequisite: Finance 331.

Introduction to theories of real property value. Techniques of value determination. Data analysis techniques.

435. Real Estate Investment Analysis (3) I, II

Prerequisites: Finance 335 and Finance 431 or 433.

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.

445. Estate Planning (3) I

Prerequisite: Finance 323.

Fundamentals of estate planning, social and family implications of federal/state taxation of transfers of wealth by gift or at death. Study of trusts, conservatorships, guardianship and postmortem planning. How planning is affected by business assets, employee benefits, and insurance.

496. Selected Topics in Finance (1-4)

Prerequisite: Consent of department chair.

Selected areas of concern in finance. 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.

498. Investigation and Report (1-3) I, II

Prerequisites: Senior standing and consent of instructor.

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.

499. Special Study (1-3)

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

521. Individual Insurance Management (4) II

Prerequisites: Undergraduate: Completion of lower division requirements for the major. Graduate: Completion of prerequisite core.

Economic, legal, social and ethical considerations of individual, business and group insurance including life, health, property, liability and social insurance. Risk exposure and policy analysis. Employee benefit and pension planning including regulation and taxation issues.

589. Personal Financial Planning (3) I

Prerequisite: Finance 323.

Financial planning process including data gathering, cash flow and debt considerations, goal programming (including retirement and education funding), integration, plan formulation, and implementation. Practice management considerations including establishment of ethical and legal, client and professional relationships.

**GRADUATE COURSES
Refer to Bulletin of the Graduate Division.**

French

In the College of Arts and Letters

OFFICE: Business Administration 304
TELEPHONE: (619) 594-6491
FAX: (619) 594-8006
EMAIL: french.coord@sdsu.edu

Faculty

Emeritus: Ghilbert, Glasgow, Jackson, Max, Nelson, Palmer

Chair:

Professors: Benkov, Cox, Edson, Loughrin-Sacco, Lyman-Hager, Schorr

Associate Professor: Cornwell

Lecturer: Rohrer

Offered by the Department of French and Italian Languages and Literatures

Master of Arts degree in French.

Major in French with the B.A. degree in liberal arts and sciences.

Teaching major in French for the single subject teaching credential in foreign languages.

Major in international business, with emphasis in French. **See** International Business.

Minor in French.

The Major

A student who majors in French learns to speak the language, to read French literature in its original form, and to interact with members of an important cultural community. The French major can help prepare a student for a career in education, business, or the arts.

Students generally choose to major in French in order to enrich their lives rather than to train for a career, but many employers recognize the value of a well-rounded liberal arts education. 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, or political science.

A significant number of French majors choose a career in teaching. Recent studies indicate that the demand for qualified teachers is rising. With a secondary teaching credential, one can teach at the high school level or pursue more advanced study in preparation for a university career, either in French or in related subjects such as linguistics or comparative literature.

Students majoring in French are strongly encouraged to participate in CSU-IP (California State University International Programs) and other approved study abroad programs in French-speaking countries.

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.

French Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 11021)

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.

Foreign Language Requirement. The foreign language requirement is automatically fulfilled through coursework for preparation for the major.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

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 may be applied to the major.

French Major

In preparation for the Single Subject Teaching Credential in Foreign Languages

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 11021)

All candidates for a teaching credential must complete all requirements as outlined in this section of the catalog under Policy Studies or Teacher Education. For students completing the single subject teaching credential program, no more than 52 units in French courses can apply to the degree.

This major may be used by students in policy studies 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 French is required for the degree.

To be recommended for student teaching, students must demonstrate proficiency in French by passing the departmental written and oral tests.

Preparation for the Major. French 100A, 100B, 201, 210, 220, and 221. (22 units)

Foreign Language Requirement. The foreign language requirement is automatically fulfilled through coursework for preparation for the major.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 30 upper division units in French to include French 301, 302, 305A, 305B, 421, 422, 501, and nine units of upper division electives taught in French.

French Minor

The minor in French consists of a minimum of 15 units in French, nine units of which must be in upper division courses, with a minimum of six upper division units completed in residence at San Diego State University.

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.

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 French 301, 305A or 305B, and 421 or 422.

Foreign Language Requirement for the B.A. Degree in Liberal Arts and Sciences

Students electing the study of French to fulfill the foreign 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 foreign 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, although students with fewer than three years of high school level language may complete the first semester college course for graduation credit.

2. The first *three years* of high school level language count as the equivalent of the first two college semesters, although students with fewer than four years of high school level language may complete the second semester college course for graduation credit. Students who have completed three years of foreign language in high school will not receive credit for the first semester college course unless at least five years separate the last high school course and the first college course.

3. *Four years* of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the foreign language requirement.

Courses

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.

No credit will be given when French 100A, 100B, or the 200 series are taken out of sequence.

100A. Elementary French I (5) I, II (CAN FREN 2) (100A + 100B: CAN FREN SEQ A)

Interactive introduction to speaking, reading, and writing French in a cultural context. Essential language structures for communication at the novice level. Not open to students who have completed three years of high school French unless the third course was completed five or more years ago.

100B. Elementary French II (5) I, II (CAN FREN 4) (100A + 100B: CAN FREN SEQ A)

Prerequisite: French 100A or two years of high school French.

Continuation of French 100A. Not open to students who have completed four years of high school French unless the fourth course was completed five or more years ago.

201. Readings in French (3)

Prerequisite: French 100B or three years of high school French.

French majors, minors, and International Business majors are encouraged to enroll concurrently in French 210. Emphasis on reading. See Class Schedule for emphasis offered: Readings in French Culture, Readings in Francophone Culture, or Readings in Business French. (Formerly numbered French 200B.)

210. French Grammar (3)

Prerequisite: French 100B with a grade of C or better or three years of high school French.

French majors, minors, and International Business majors are encouraged to enroll concurrently in French 201.

Comprehensive survey of French grammar at the intermediate level. Analysis and use of typical French structures. (Formerly numbered French 200A.)

220. Grammar of Spoken French (3)

Prerequisite: French 210.

French majors, minors, and International Business majors are encouraged to enroll concurrently in French 221.

Analysis of grammar and use of modern French through study of cultural materials, for proficiency in oral communication. (Formerly numbered French 200D.)

221. Writing French (3)

Prerequisite: French 210.

French majors, minors, and International Business majors are encouraged to enroll concurrently in French 220.

Emphasis on written composition: study of a variety of prose models and practice in writing. (Formerly numbered French 200C.)

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.

French 301 is not open to students who hold a French *baccalauréat*. French 301 and 302 may not be taken concurrently or out of sequence.

301. Advanced Grammar and Composition (3) I, II

Prerequisites: Twelve units of 200-level French, and completion of the General Education requirement in Foundations II.C., Humanities. General Education prerequisite not required for French majors.

Advanced grammar and stylistics; intensive writing practice.

302. Translation and Stylistics (3) II

Prerequisites: French 301, and completion of the General Education requirement in Foundations II.C., Humanities. General Education prerequisite not required for French majors.

Comparative stylistics of French and English, taught through translation.

305A. Survey of French Literature (3) I

Prerequisites: Twelve units of 200-level French, and completion of the General Education requirement in Foundations II.C., Humanities. General Education prerequisite not required for French majors.

Important movements, authors, and works in French literature from the Middle Ages to the Revolution.

305B. Survey of French Literature (3) II

Prerequisites: Twelve units of 200-level French, and completion of the General Education requirement in Foundations II.C., Humanities. General Education prerequisite not required for French majors.

Important movements, authors, and works in French literature from the Revolution to present.

421. French Civilization (3) II

Prerequisites: Twelve units of 200-level French, and completion of the General Education requirement in Foundations II.C., Humanities. General Education prerequisite not required for French majors.

French civilization from Middle Ages to the present. Artistic, intellectual achievements and cultural movements.

422. Contemporary France (3) I

Prerequisites: Twelve units of 200-level French, and completion of the General Education requirement in Foundations II.C., Humanities. General Education prerequisite not required for French majors.

Contemporary France, emphasizing political, economic and social structures as well as artistic, intellectual, and cultural trends.

423. Commercial French (3) II

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 Pratique de Français Commercial et Economique* offered by the Paris Chamber of Commerce.

424. French Cinema and Theory (3)

Two lectures and two hours of activity.

Prerequisites: Twelve units of lower division French. General Education students must also have completed Foundations II.C. Humanities.

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.

425. Francophone Africa in Literature and Film (3)

Prerequisites: French 301 for French majors; upper division standing for non-French majors. General Education students must also have completed Foundations II.C. Humanities.

French-speaking African cultural history through literature and film. Consistency of African cultural expressions and conventions. Taught in English.

496. Topics in French Studies (1-4)

Topics in French literature, culture and linguistics. May be repeated with new content. Maximum credit nine units. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. May be taught in English. See Class Schedule for specific content.

499. Special Study (1-3) I, II

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)**

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.

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.

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.

561. Linguistics and the Teaching of French (4)

Three lectures and two hours of laboratory.

Prerequisite: French 302.

Applied linguistics, methodology, and technology for teachers of French. Not open to students with credit or concurrent registration in Spanish 561.

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. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

**GRADUATE COURSES
Refer to Bulletin of the Graduate Division.**

General Mathematics Studies

In the College of Arts and Letters

OFFICE: Nasatir Hall 227A
TELEPHONE: (619) 594-2225
FAX: (619) 594-6530

Faculty

Chair:
Lecturers: Fulcomer, Morgan, Quan
Adjunct: Keeseey

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, the SDSU Mathematics Competency requirement or SDSU Mathematics Departmental Placement Examination, Part IA (intermediate algebra) requirement. Passing the final examination for General Mathematics Studies 90B, 99B, 99C, or 91 satisfies the SDSU Mathematics Competency requirement. Credit in General Mathematics Studies 99C or 91 also satisfies the ELM* and SDSU Mathematics Placement Examination, Part IA, requirements necessary for students enrolling in designated mathematics and statistics courses. For more information on the mathematics competency requirements, refer to the "Graduation Requirements" section of this catalog.

In addition to the competency courses, 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 these courses *only if* the student has already attempted and failed the ELM.

Courses

LOWER DIVISION COURSES (Non-Baccalaureate Credit)

General mathematics studies courses numbered below 100 may not be used to satisfy general education or graduation requirements.

90A. Fundamentals of Mathematics (3) Cr/NC/SP I, II, S

Prerequisite: Appropriate score on the CSU Entry-Level Mathematics Examination (ELM), the General Mathematics Studies diagnostic test, or other standardized mathematics examination.

Review of arithmetic and elementary algebra; topics from geometry covered in adjunct workshops (General Mathematics Studies 98A). Students earning "Cr" (credit) should enroll in General Mathematics Studies 91. Students earning "SP" (satisfactory progress) or "NC" (no credit) should repeat General Mathematics Studies 90A. May be repeated with consent of instructor. Maximum credit six units. (Formerly numbered Academic Skills 90A.)

*90B. Basic Algebra Review (3) Cr/NC I, II, S

Prerequisite: Appropriate score on the General Mathematics Studies diagnostic test or other standardized mathematics examination or

participation in specified programs.

Designed for students who need to satisfy the SDSU Mathematics Departmental Placement Examination, Part C (competency) requirement, or for students in specified special programs. Topics covered include elementary algebra, intermediate algebra, and geometry. Course final examination is SDSU Mathematics Departmental Placement Examination, Part C; a passing score on the final examination gives "Cr" (credit) and satisfies SDSU Mathematics Competency requirements. (Formerly numbered Academic Skills 90B.)

91. Intermediate Algebra (3) Cr/NC I, II, S

Prerequisites: Credit in General Mathematics Studies 90A, 90B or 99A, 99B or appropriate score on the General Mathematics Studies diagnostic test or the ELM.

Designed to prepare students for Mathematics Departmental Placement Examination, Part IA, which is given as final examination for the course. A review of intermediate algebra skills. Topics include rational and radical expressions, quadratic equations, set and function notations, logarithms, and complex numbers. Credit in General Mathematics Studies 91 satisfies Mathematics Departmental Placement Examination, Part IA, Mathematics Competency, and Entry Level Mathematics Examination requirements.

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 General Mathematics Studies 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. Learning Skills

B. Communication Skills

99A. Fundamentals of Mathematics (Integrated Curriculum) (4) Cr/NC/SP I, II

Three lectures and one hour of activity.

Prerequisite: Appropriate score on the CSU Entry-Level Mathematics Examination (ELM), the General Mathematics Studies diagnostic test, or other standardized mathematics examination and freshman class standing.

Review of arithmetic and basic algebra; topics from geometry covered in adjunct workshops. Students attend weekly reinforcement workshops one hour each week in mathematics laboratory. Students attaining a score of 20 or better on final examination earn "Cr" (credit) in course and enroll in General Mathematics Studies 99C the next semester. Students attaining 15 to 19 points earn an "SP" (satisfactory progress); these students should enroll in a specified section of General Mathematics Studies 99B in the following semester. Students attaining scores of 14 or lower receive "NC" (no credit) and should repeat General Mathematics Studies 99A.

* General Mathematics Studies 90B and 99B is not offered at the Imperial Valley Campus. Students who do not attain a Cr in General Mathematics Studies 90A at the Imperial Valley Campus should repeat General Mathematics Studies 90A.

General Mathematics Studies

***99B. Fundamentals of Mathematics (Integrated Curriculum) (4) Cr/NC I, II**

Three lectures and one hour of activity.

Prerequisites: Freshman class standing and participation in specified special program.

Topics covered include elementary algebra with review of arithmetic and topics from geometry and intermediate algebra. Class sessions augmented by one hour of reinforcement laboratory work each week. Prepares students for CSU Entry Level Mathematics Examination (ELM), but does not satisfy ELM requirement. Course final is SDSU Mathematics Placement Examination, Part C; a score of 15 or better out of 25 on final examination earns "credit" and satisfies the SDSU Mathematics Competency requirement.

99C. Intermediate Algebra (Integrated Curriculum) (4) Cr/NC

Three lectures and one hour of activity.

Prerequisite: Grade of "Cr" (credit) in General Mathematics Studies 99A or 99B or appropriate score on ELM or General Mathematics Studies diagnostic test and freshman class standing.

For freshmen who have attained "Cr" (credit) in General Mathematics Studies 99A or 99B or whose ELM or diagnostic score indicates that this is the appropriate level for them, but who have not yet satisfied the CSU-Entry Level Mathematics Examination (ELM), SDSU Mathematics Placement Examination, Part IA, or SDSU Mathematics Competency requirements. Course content is identical to General Mathematics Studies 91, but General Mathematics Studies 99C class sessions will be augmented by one mandatory hour of reinforcement laboratory work each week. Course final is SDSU Mathe-

atics Placement Examination, Part IA; a score of 15 or better out of 25 earns "credit" and satisfies ELM, SDSU Mathematics Placement Examination, Part IA, and SDSU Mathematics Competency requirements.

* General Mathematics Studies 90B and 99B are not offered at the Imperial Valley Campus. Students who do not attain a Cr in General Mathematics Studies 90A at the Imperial Valley Campus should repeat General Mathematics Studies 90A.

NOTE:

General Mathematics Studies 90A is equivalent to General Mathematics Studies 99A.

General Mathematics Studies 90B is equivalent to General Mathematics Studies 99B.

Enrollment in General Mathematics Studies 99A, 99B and 99C is restricted to students participating in the Integrated Curriculum program.

General Studies

The University offers a number of courses which are not part of a regular departmental curriculum. They provide students with opportunities for achieving academic credit through interdisciplinary and nontraditional coursework.

General Courses

LOWER DIVISION COURSES

100. University Seminar (1) Cr/NC

Prerequisite: Open only to freshmen.

Provides opportunities to interact with faculty 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. (Formerly numbered and entitled General Studies 250, University Seminar.)

- A. University Seminar
- B. Integrated Curriculum
- C. Living Learning Center

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, CH-3350. 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.

275. Honors Special Study (1)

For further information contact the Division of Undergraduate Studies.

Prerequisite: Admission to the University Honors Program.

Special study associated with a lower division course offered as an honors section, and serving as an extension of the course.

UPPER DIVISION COURSES (Intended for Undergraduates)

330. Plagues Through the Ages (3) I, II

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

Political, economic, religious, and cultural effects of disease. Significant role epidemics and disease played in development of civilizations from beginning of recorded history to present.

340. Confronting AIDS (3)

Prerequisite: Completion of the General Education requirement in Foundations II.A. Natural Sciences and Quantitative Reasoning, II.B. Social and Behavioral Sciences, and II.C. Humanities.

Examines the AIDS epidemic from historical, epidemiological, biological, medical, psychological, political, legal, and ethical perspectives.

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. Completion of prerequisites required.

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, CH-3350. 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.

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.

420. Disability and Society (3) I, II

Prerequisites: Psychology 101, Sociology 101, or Anthropology 101, and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences.

Range of human experience of individuals with disabilities: attitudes toward individuals and interrelationship between societal institutions and needs of people with disabilities; historical response to these needs and contemporary issues with particular emphasis on normalization, integration, and community living.

450. Life and Culture Semester Abroad (3)

Prerequisites: Upper division standing and completion of the General Education requirement in Foundations II.C., Humanities.

Life and culture of a foreign country through an approved "semester abroad" program approved by the Division of Undergraduate Studies. Requires lecture attendance, excursions and site visits, examinations and written reports. See Class Schedule for geographic location.

Interdisciplinary Courses

General Studies courses (250 or 350) are interdisciplinary selected topics courses.

Students interested in enrolling in General Studies 250 or 350 should contact the faculty adviser of the department(s) offering the course for further details. May be repeated with new content. Maximum credit four units.

250. Interdisciplinary Topics (1-4)

350. Interdisciplinary Topics (1-4)

Geography

In the College of Arts and Letters

OFFICE: Storm Hall 323
TELEPHONE: (619) 594-5437
FAX: (619) 594-4938

Faculty

Emeritus: Blick, Colombo, Eidemiller, Greenwood, Johnson, Keen, Kiewiet de Jonge, O'Brien, Storm, Taylor, Yahr

Chair: Aguado

The Stephen and Mary Birch Foundation Chair in Geographical Studies: Getis

Professors: Aguado, Aitken, Ford, Franklin, Fredrich, Griffin, Getis, Hope, McArthur, O'Leary, Pryde, Quastler, Stow, Stutz, Weeks, Wright

Associate Professor: Rey

Assistant Professors: Mattingly, Nelson

Lecturer: Kelly

Offered by the Department

Doctor of Philosophy degree in geography.

Master of Arts degree in geography.

Major in geography with the B.A. degree in liberal arts and sciences.

Emphasis in methods of geographical analysis.

Emphasis in natural resource and environmental geography.

Emphasis in physical geography.

Emphasis in urban and regional analysis.

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 Geography Department to endow a chair and create a Center for Earth Systems Analysis Research. Dr. Arthur Getis, internationally recognized for his expertise in theory and methodology of spatial analysis applied to urban and economic systems, is the second 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 theories from 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, soils, landforms, and resources. As social scientists, geographers explore such topics as the arrangement of societies on the earth's surface, land use patterns, urbanization, resource and energy usage, and environmental conservation.

The Department of Geography offers a broad range of fields from which to select an emphasis. These include physical geography—focusing on scientific explanations of the earth's physical features and processes; natural resource and environmental geography—concerned with human impacts on the earth; urban and regional analysis—dealing with the form of cities and the dynamics of regional systems; methods of geographical analysis—providing a background in cartography, geographic information systems, remote sensing and spatial statistics. A comprehensive program is offered in general geography—encompassing topics from all of the emphases.

The Department also offers a Certificate in Geographic Information Science. This program is for students interested in mapping, computer graphics, surveying, aerial photography, and the use of satellite technology to study earth resources. A variety of career opportunities exist for geography majors. In recent years many graduates with bachelor degrees have entered the fields of urban and environmental planning, both in the public and private sectors. Employment is also available as

geographic information systems specialists, cartographers, park naturalists, and remote sensing specialists. The following represent some of the jobs held by recent graduates: environmental impact analyst, urban planner, cartographer, park ranger, transportation planner, travel agent, teacher, zoning investigator, terrain analyst. Some graduates have chosen to pursue opportunities in business where firms are interested in hiring college graduates with broad academic backgrounds.

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.

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.

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.

General Geography Program

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. (7 units)

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or English 508W, 581W, 584W, or Rhetoric and Writing Studies 305W, 500W, 503W with a grade of C (2.0) or better.

Major. A minimum of 27 upper division units in geography to include three units selected from each of the following groups: (a) Geography 321-339; (b) 353-358, 554-560, 585-586; (c) 370, 378, 545, 570-577; (d) 378, 401, 409, 504-511, 545; (e) 380-381; (f) 385, 484, 488, 581-588, and nine units from one of the following groups: (a) Physical: Geography 378, 401, 409, 504-511, 545; (b) Natural Resource and Environmental: 370, 378, 545, 560, 570-577; (c) Urban and Regional Analysis: 353-358, 385, 554-560, 585-586; (d) Methods of Geographical Analysis: 380-385, 484, 488, 581-588; (e) Cultural: 354, 554, 560, but not more than six units from Geography 312, 321-339. No course may be used more than once to satisfy this requirement.

Emphasis in Methods of Geographical Analysis

Students selecting this emphasis are not required to complete a minor in another department.

Preparation for the Major. Geography 101, 101L, 102; Computer Science 106 or 107; and a three-unit course in introductory statistics. (13 units)

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or English 508W, 581W, 584W, or Rhetoric and Writing Studies 305W, 500W, 503W, with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units in geography to include Geography 385; 15 units selected from Geography 380-381, 484, 488, 498, 581-588*; three units selected from each of the following groups: (a) 321-339; (b) 370, 545, 570-577; (c) 353-358, 554-560; six units selected from Geography 378, 401, 409, 504-511; and three units of upper division geography electives.

* Geography 595 may be used to satisfy three units in this group where appropriate and approved by the department.

Emphasis in Natural Resource and Environmental Geography

Students selecting this emphasis are not required to complete a minor in another department.

Students may select either track (a) Environmental Analysis or track (b) Environmental Policy.

Preparation for the Major. Geography 101, 101L, 102; Biology 100 and 100L; Political Science 102. (14 units)

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or English 508W, 581W, 584W, or Rhetoric and Writing Studies 305W, 500W, 503W, with a grade of C (2.0) or better.

Track (a): Environmental Analysis

Additional Preparation for the major. Mathematics 121 or 150; Chemistry 100; and Physics 107. (11-13 units)

Major. A minimum of 36 upper division units in geography to include Geography 370 and 385; three units from 380-381; three units from 321-339; six units from 378, 401, 409, 504-511, and three units from 353-358, 554-559.

An additional 15 units to be selected from 3 or 4 units from Geography 484 or 488, three units from 581-588 and 9 units from 545, 560, 570-574, 575 or 577, 595.

Track (b): Environmental Policy

Additional Preparation for the major. Economics 101 or 102. (3 units)

Major. A minimum of 36 upper division units in geography to include Geography 370 and 385; three units from 380-381; three units from 321-339; six units from 378, 401, 409, 504-511, and three units from 353-358, 554-559.

An additional 15 units to be selected from 3 or 4 units from Geography 484 or 488, 581-588 and 12 units from 545, 560, 570-574, 575 or 577, 595.

Emphasis in Physical Geography

Students selecting this emphasis are not required to complete a minor in another department.

Preparation for the Major. Geography 101, 101L, 102; Mathematics 121 or 150; Chemistry 200; Physics 180A, 182A. (19-21 units)

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or English 508W, 581W, 584W, or Rhetoric and Writing Studies 305W, 500W, 503W, with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units in geography to include Geography 380, 385; fifteen units selected from Geography 378, 401, 409, 498, 504-511*; six units selected from Geography 484, 488, 581-588; and three units selected from each of the following groups: (a) 321-339; (b) 353-370, 545, 554-577; and three units of electives.

* Geography 595 may be used to satisfy three units in this group where appropriate and approved by the department.

Emphasis in Urban and Regional Analysis

Students selecting this emphasis are not required to complete a minor in another department.

Preparation for the Major. Geography 101, 101L, 102; Computer Science 106; Economics 102. (13 units)

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or English 508W, 581W, 584W, or Rhetoric and Writing Studies 305W, 500W, 503W, with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units in geography to include Geography 385; 15 units selected from Geography 353-354, 358, 498, 554-560, 572, 585-586*; six units selected from 378, 401, 409, 504-511; three additional units from each of the following groups: (a) 321-339; (b) 370, 545, 570-577; (c) 380-381; and three units of electives.

* Geography 595 may be used to satisfy three units in this group where appropriate and approved by the department.

Geography Minor

The minor in geography consists of a minimum of 18-19 units of geography to include Geography 101, 102 and one of the following areas:

Cultural: Six units from Geography 312, 354, 554, 560, and six units selected from regional courses Geography 321-339.

Methods of Geographical Analysis: Nine units selected from Geography 380-385, 484, 488, 581-588, and three units selected from any other upper division course.

Natural Resource and Environment: Nine units selected from Geography 370, 378, 545, 560, 570-577, and three or four units selected from methods courses Geography 380-385, 484, 488, 581-588.

Physical: Nine units selected from Geography 378, 401, 409, 504-511, 545, and three or four units selected from methods courses Geography 380-385, 484, 488, 581-588.

Urban and Regional Analysis: Nine units selected from Geography 353-358, 554-560, and three or four units from either methods or regional courses Geography 321-339, 380-385, 484, 488, 581-588.

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*

The purpose of the program is to prepare students to acquire, manage, and visualize 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 381, 484, 488, 582, 584, 585, 588 and 12-15 units selected from Computer Science 107, 108, 220, 310, 320, 503, 514, 520, 535, 551, 575. Courses with relevant content may be substituted for the geography and computer science courses with the approval of the certificate adviser. Courses in the certificate may be counted toward the major in geography but may not be counted toward the minor.

* Additional prerequisites required for this certificate.

Courses

LOWER DIVISION COURSES

101. Principles of Physical Geography (3) I, II (CAN GEOG 2)

Principles underlying the fundamental nature and dynamics of the physical world: the atmosphere, hydrosphere, biosphere, lithosphere, and their systematic spatial relationships.

101L. Physical Geography Laboratory (1) I, II

Three hours of laboratory.

Prerequisite: Credit or concurrent registration in Geography 101.

Practical exercise and observation in map analysis, weather elements, climatic regions, and the earth's landform features. Designed to supplement Geography 101.

102. Principles of Cultural Geography (3) I, II (CAN GEOG 4)

Introduction to cultural geography, covering the elements of culture, such as technology, language, religion, political organization, methods of livelihood, settlement patterns and population, and the regional distribution of these elements over the earth. Field trips may be arranged.

103. Principles of Meteorology (3) I, II

The composition, structure, and circulation of the atmosphere, including elementary theory of storms and other weather disturbances.

UPPER DIVISION COURSES (Intended for Undergraduates)

312. Culture Worlds (3) I, II

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

Geographical characteristics and development of major cultural realms of the world. Analysis of spatial components of contemporary conflict within and between these regions.

321. United States (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors. Recommended: Geography 101 or 102.

Systematic and regional analysis of physical and cultural landscapes of the United States.

323. Middle America (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors. Recommended: Geography 101 or 102.

The land and peoples of Mexico, Central America, and the islands of the Caribbean; a survey of the resources, economies, and trade of the region. Field trips may be arranged.

324. South America (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors. Recommended: Geography 101 or 102.

The physical regions and human geography of South America, including the history of colonization and the exploitation of resources.

336. Europe (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations 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 except the Soviet Union.

337. Republics of the Former Soviet Union (3) I

Prerequisite: Completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors. Recommended: Geography 101 or 102.

Ethnic composition, industrial and agricultural resources, demographics, and environmental management in this region, with an emphasis on the various cultural regions.

339. Australia, New Zealand, and the Pacific Islands (3)

Prerequisite recommended: Geography 101 or 102.

Regional geography of Australia, New Zealand, and the Pacific Islands. Distribution of cultural groups, economic activities, and evolution of current land use patterns.

353. Location of Economic Activity (3)

Prerequisite recommended: Geography 101 or 102.

International arrangement and interrelationship of resources, production, exchange and consumption; principles and theory in industrial location; world trade and economic development selecting favorable locations for capital investments, determining growth potential of service and market areas, meeting environmental impact requirements.

354. Geography of Cities (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations 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.

358. Transportation Geography (3) I

Prerequisite recommended: Geography 101 or 102.

The spatial distribution of transportation networks and commodity movement and their relationship to the distribution of economic activity.

370. Environmental and Natural Resource Conservation (3) I, II

Prerequisites: Geography 101 or 102; and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors.

Quality of environmental and natural resources within changing human and natural systems: pollution problems; preservation of open space, habitats, and wilderness; and conservation of natural resources.

378. Environmental Physiography (3)

Prerequisites: Geography 101 and Mathematics 121 or 150.

Introduction to environmental physiographic dynamics. Assessment of man's role in these dynamics and their effect on urban and rural land use, including such topics as induced erosion, landslides, and flooding.

380. Map Investigation (3) I, II

Two lectures and three hours of laboratory.

Prerequisite: Geography 101 or 102.

Use of the map as an analytical tool in geography. History of developments in cartography.

381. Maps and Graphic Methods (3) I, II

Two lectures and three hours of laboratory.

Prerequisite: Geography 101 or 102.

The art and science of creating graphs and maps as media for describing and analyzing geographic phenomena. Laboratory instruction and practice in cartographic techniques with emphasis on presenting quantitative data.

385. Spatial Data Analysis (3) I, II

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.

401. Physiography (3)

Prerequisite: Geography 101.

Morphology and genetic interpretation of the relief features of the earth's surface.

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.

484. Geographic Information Systems (3)

Two lectures and three hours of laboratory.

Prerequisite: Three units from Geography 380, 381, 488, 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.

488. Remote Sensing of Environment (4) I

Three lectures and three hours of laboratory.

Prerequisite: Geography 101. Recommended: Physics 180A-180B.

Techniques for acquiring and interpreting remotely sensed data of environment. Electromagnetic radiation processes, aerial photographic systems, and human interpretation of aerial and satellite imagery. Geographic analysis of selected terrestrial, oceanographic, and atmospheric processes and resources.

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.

498. Senior Thesis (3)

Prerequisite: An overall grade point average of 3.0 and consent of department.

A written thesis based on an individual research project.

499. Special Study (1-3) I, II

Individual study. Maximum credit six units.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

504. Coastal and Submarine Physiography (3)

Prerequisites: Geography 101 and Mathematics 121 or 150.

Analysis of marine waves, of their modification in shallow waters, of coastal currents and tides. Interpretation of coastal and submarine relief in relation to environmental processes and their modification by humans. Field trips may be arranged.

505. Geography of Soils (3) II

Prerequisite: Geography 101.

The nature, properties and distribution of soils and their relationships to the influence of climates, landforms, and human activity. Field trips may be arranged.

507. Geography of Natural Vegetation (3) I, II

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.

508. Environmental Climatology (3) I

Prerequisites: Geography 103; Mathematics 121 or 150.

Interaction between the atmosphere and earth surface. Solar and thermal radiation, turbulent heat transfer, soil heat transfer. Change in the atmosphere due to natural variations and human activity. Impacts on the environment.

509. Regional Climatology (3) II

Prerequisite: Geography 103.

The causes of climatic types as they occur throughout the world. Principles of several climatic classifications.

510. Advanced Meteorology (3) II

Prerequisites: Geography 103; Mathematics 121 or 150.

Physical characteristics of the atmosphere including thermodynamics, moisture and condensation, atmospheric aerosol, and cloud processes.

511. Hydroclimatology (3)

Prerequisites: Geography 101 or 103 and Mathematics 121 or 150.

Hydrologic cycle, energy and mass fluxes from the earth to the atmosphere and land-atmosphere interactions. Agricultural and hydrologic significance of spatial variability of energy and mass fluxes.

545. Arid Lands (3)

Prerequisites: Geography 101 and 370; Biology 100 or 201.

Physical geography and human use of arid lands. Traditional and modern land use systems in context of technological and economic development. Environmental and social impacts of development including desertification.

554. World Cities: Comparative Approaches to Urbanization (3) II

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.

556. Location and Spatial Structure of Cities (3)

Prerequisite: Geography 354 or three units of upper division coursework in a related field.

Principles and characteristics of urban growth and settlement; the internal structure and functioning of urban centers; spatial models of urban land use; growth management, transportation problems, and sociopolitical urban problems. Field trips may be arranged.

559. Urban Transportation Geography (3)

Prerequisite: Three units of upper division urban or transportation coursework in geography or related field.

Urban transportation networks and their effects, past, present and future, on the economy and physical structure of the urban region. Field trips may be arranged.

560. Environmental Perception and Behavioral Geography (3)

Prerequisite: Geography 102.

Contemporary perceptual and behavioral theories and methods in geography. Problems of empirical research and application in the built and natural environments.

570. Environmental Resource Conservation (3)

Prerequisite: Geography 370.

Management of environmental and natural resources. Effective programs and the institutional frameworks in which they occur.

571. Energy Resources and the Environment (3)

Prerequisite: Geography 370. Recommended: Physics 107 or 301.

Location and distribution of conventional and renewable energy resources, their environmental effects, and policy questions regarding future development and use of energy resources.

572. Land Use Analysis (3) II

Prerequisite: Geography 370.

Problems of maintaining environmental quality in the process of land conversion from rural to urban uses with emphasis on land capability and suitability studies. Field trips may be arranged.

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.

574. Water Resources (3) I

Prerequisite: Geography 370.

Occurrence and utilization of water resources and the problems of water resource development. Field trips may be arranged.

575. Geography of Recreational Land Use (3) I, II

Prerequisite: Geography 101 or 102.

Importance of location and environment in the use, management, and quality of recreation areas. Field trips may be arranged.

577. Geography of the National Parks (3)

Prerequisite: Geography 370.

Human and land relationships in the national parks of the United States. Emphasis on problems arising from the preservation and use mandate under which parks are managed.

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.

582. Automated Cartography (3)

Two lectures and three hours of laboratory.

Prerequisite: Geography 380, 381, or 484.

Computerized methods of graphically presenting and analyzing spatial data; examination of existing mapping software and digital data sources.

584. Geographic Information Systems Applications (3) II

Two lectures and three hours of laboratory.

Prerequisite: Geography 484, 582, or 588.

Conceptualization, completion, and implementation of geographic information systems (GIS) at local, regional, national, and global levels. Spatial analysis and modeling with GIS. GIS in planning, management, and research.

585. Quantitative Methods in Geographic Research (3)

Prerequisite: Geography 385.

Application of statistical techniques to geographic research including simple regression and correlation, multiple regression, classification, factor analysis, and computer applications.

586. Qualitative Methods in Geographic Research (3) II

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.

588. Intermediate Remote Sensing of Environment (4) II

Three lectures and three hours of laboratory.

Prerequisites: Geography 385 and 488.

Multispectral remote sensor systems and interpretation of imagery from nonphotographic systems. Computer-assisted image processing. Geographic analysis of selected terrestrial, oceanographic, and atmospheric processes.

595. Geographic Internship (3) I, II

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. Maximum credit three units.

596. Advanced Topics in Geography (1-3)

Prerequisite: Six upper division units in geography.

Advanced special topics in geography. 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 combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES
Refer to Bulletin of the Graduate Division.

Geological Sciences

In the College of Sciences

OFFICE: Chemistry/Geology 204
TELEPHONE: (619) 594-5586
FAX: (619) 594-4372
EMAIL: department.office@geology.sdsu.edu

Faculty

Emeritus: Brooks, Gastil, Kern, Krummenacher, McEuen, Ptacek, Roberts, Threet

Chair: Girty

The Rollin and Caroline Eckis Chair in Seismology: Day

Professors: Abbott, Berry, Bertine, Day, Dorman, Girty, Huntley, Jiracek, Kimbrough, Marshall, Miller, Peterson, Rockwell, Walawender
Associate Professors: Frost, Thorbjarnarson, Wallace

Offered by the Department

Master of Science degree in geological sciences and Doctor of Science degree in earth sciences (cooperative program).

Master of Science degree in geological sciences.

Major in geological sciences with the B.S. degree in applied arts and sciences.

Emphasis in engineering geology.

Emphasis in geochemistry.

Emphasis in geophysics.

Emphasis in hydrogeology.

Emphasis in marine geology.

Emphasis in paleontology.

Teaching major in geological sciences for the single subject teaching credential in science.

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. Rollin Eckis is 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 Major

Geology is the study of the earth, its composition, its history, and its constantly changing character.

Geologists study the origin and evolution of our planet; the chemical and physical properties of minerals, rocks, and fuels; the structure of our mobile crust - its newly forming ocean floors and its ancient, drifting continents; the history of life; and human adaptation to earthquakes, volcanic eruptions, landslides, and floods. The subject matter of geology ranges from dinosaurs to the prediction of earthquakes.

Students who are curious about the planet on which we live, challenged by problems which involve the earth, and intrigued by the potential of a subject which combines the best of both the arts and sciences, should consider geological sciences as a major.

The employment outlook is favorable, particularly with engineering, hydrogeology, and toxic waste disposal firms and energy companies, and as school teachers.

A geology graduate may be employed as one of the following professionals: hydrologist, geophysicist, geochemist, environmental scientist, oceanographer, teacher, research technician, geological surveyor, paleontologist, energy and resource explorer, and resource planner.

Geologists are primarily employed by private corporations, including petroleum, mining, construction, quarry, hydrology, and engineering geology companies; and government agencies, such as the U.S. Geological Survey, the U.S. Bureau of Reclamation, the California Department of Conservation, and regional planning offices. Students with graduate degrees are sought for teaching positions in secondary schools, community colleges, and universities.

Geological Sciences Major

With the B.S. Degree in Applied Arts and Sciences (Major Code: 19141)

All candidates for a degree in applied arts and sciences must complete the graduation requirements listed in the section of this catalog on "Graduation Requirements." All required upper division courses must be taken for letter grades only, not credit/no credit.

Courses to satisfy the requirement of 36 or more upper division units in the major may be selected from upper division geological sciences courses not explicitly excluded. Students may petition the department to include courses from other disciplines to complete the upper division major requirement.

A minor is not required with this major.

General Geology Program

Preparation for the Major. Geological Sciences 105, 200, 221, and 224; Biology 100, 100L, or 101, 101L; Chemistry 200, 201; Mathematics 150; Physics 180A-180B and 182A-182B; Statistics 250. (45 units)

Recommended: Geological Sciences 100, 101; Mathematics 151 and 252 and the Physics 195 series are highly recommended for those students interested in the more quantitative aspects of geology.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 37 upper division units in approved courses to include Geological Sciences 300, 306, 307, 498A, 498B, 508, 536, 537, and either 525 or 530 and 530L; at least two of the following: Geological Sciences 501, 502, 505, 514, 520, 521, 540, 550, 551; plus three upper division units of departmentally approved courses.

Emphasis in Engineering Geology

Preparation for the Major. Geological Sciences 105, 200, 221, 224; Biology 100; Chemistry 200, 201; Engineering Mechanics 200; Mathematics 150, 151, 252; Physics 195, 196, 197; Statistics 250. (56 units)

Recommended: Civil and Environmental Engineering 218; Physics 195L, 196L, 197L.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 37 upper division units in approved courses to include Geological Sciences 300, 306, 307, 498B, 508, 536, 550, 551; Civil and Environmental Engineering 301, 462, 463; one of the following: Geological Sciences 505, 514, 530 and 530L, 560, or Civil and Environmental Engineering 465.

Because of the preparation in mathematics, physics, and geology called for in this emphasis, the College of Engineering will not require majors in this emphasis to take the prerequisites specified for Civil and Environmental Engineering 301, 462, and 463.

Emphasis in Geochemistry

Preparation for the Major. Geological Sciences 200, 221, 224; Biology 100 or 101; Chemistry 200, 201, 231, 251; Mathematics 150, 151; Physics 195, 196, 197; Statistics 250. (54 units)

Recommended: Geological Sciences 105, 307; Chemistry 431; Physics 195L, 196L, 197L; Mathematics 252.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units in approved courses to include Geological Sciences 300, 306, 498B, 501, 530, 530L, 536, 551, 552; Chemistry 410A-410B, 571.

Emphasis in Geophysics

Preparation for the Major. Geological Sciences 200, 221, 224; Biology 100 or 101; Chemistry 200, 201; Mathematics 150, 151, and 252; Physics 195, 195L, 196, 196L, 197. Engineering 280 must be taken if students select Engineering 510 in the major. (48-51 units)

Recommended: Geological Sciences 105, Physics 197L, Statistics 250.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 39 upper division units in approved courses to include Geological Sciences 300, 306, 307, 498B, 532, 533, and 560; Mathematics 342A and 342B, or Engineering 510; Physics 311, 350; Physics 400A or Electrical Engineering 340; plus three upper division units of approved courses in geological sciences at the 500 level.

Emphasis in Hydrogeology

Preparation for the Major. Geological Sciences 105, 200, 221, 224; Biology 100; Chemistry 200, 201; Mathematics 150, 151; Physics 195, 196, 197; Mathematics 252 or Chemistry 231; Statistics 250. (53 units)

Recommended: Physics 195L, 196L, 197L.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units in approved courses to include Geological Sciences 300, 306, 498B, 514, 530, 530L, 532, 536, 551, 552; Mathematics 342A-342B, or Chemistry 571; plus three to six upper division units of departmentally approved courses.

Emphasis in Marine Geology

Preparation for the Major. Geological Sciences 105, 200, 221, 224; Biology 100 or 101; Chemistry 200, 201; Mathematics 150, 151, 252; Physics 195, 195L, 196, 196L, 197, 197L. (53 units)

Recommended: Geological Sciences 537. A foreign language.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units in approved courses to include Geological Sciences 300, 306, 307, 498B, 530, 530L, 536, 540, 545, and two of the following courses: Geological Sciences 501,

508, 537, Biology 517; plus four upper division units of departmentally approved courses. Recommended: Chemistry 410A-410B for students anticipating postgraduate studies.

Emphasis in Paleontology

Preparation for the Major. Geological Sciences 105, 200, 221, 224; Biology 201, 202, 215; Chemistry 200, 201; Mathematics 150 or 121 and 122 (alternative of 121 and 122 should not be selected by students planning academic work beyond the B.S. degree); Physics 180A-180B and 182A-182B. (49-50 units)

Recommended: Geological Sciences 307.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 38 upper division units in approved courses to include Geological Sciences 300, 306, 498A, 498B, 501, 508, 516, 536, 537; Biology 515, 517; plus three upper division units of departmentally approved courses.

Geological Sciences Major

In preparation for the Single Subject Teaching Credential in Science/Geological Sciences

With the B.S. Degree in Applied Arts and Sciences (Major Code: 19141)

One of the requirements for acceptance into the College of Education's post-baccalaureate credential program is to either pass the appropriate PRAXIS and SSAT 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 geosciences 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 with the Cross-Cultural, Language, and Academic Development (CLAD) emphasis must complete the requirements outlined in the catalog under Teacher Education or Policy Studies. Contact the Center for Careers in Education or the Policy Studies in Language and Cross-Cultural Education Department for up-to-date information on prerequisites.

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.

I. Communication and Critical Thinking (9 units)

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

1. Oral Communication (3 units) to be satisfied by Africana Studies 140, Chicana and Chicano Studies 111A, or Communication 103.

2. Composition (3 units) to be satisfied by Africana Studies 120, Chicana and Chicano Studies 111B, or Rhetoric and Writing Studies 100.

3. Intermediate Composition and Critical Thinking (3 units) to be satisfied by Africana Studies 200 or Rhetoric and Writing Studies 200.

II. Foundations (28 units)

A. Natural Sciences and Quantitative Reasoning (13 units):

1. Physical Sciences (6 units) to be satisfied by Chemistry 200 and Physics 180A or 195.

2-3. Life Sciences and Laboratory (4 units) to be satisfied by Biology 100 and 100L.

4. Mathematics/Quantitative Reasoning (3 units) to be satisfied by Mathematics 150.

B. Social and Behavioral Sciences (6 units).

C. Humanities (9 units):

Complete a course in each of three of the following four areas (1. Literature; 2. Art, Classics, Humanities, Music, and Theatre; 3. Philosophy and Religious Studies; 4. Foreign Language) in the Humanities section of the Foundations component of the regular General Education program. Refer to General Education course offerings in the Graduation Requirements section of the catalog. One semester of a foreign language is recommended.

III. American Institutions

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.

IV. Explorations (9 units)

A. Upper division Social and Behavioral Sciences (3 units). Linguistics 420 is recommended.

B. Upper division Humanities to be satisfied by History 441 (3 units).

C. Upper division Humanities (3 units). A course in cultural diversity is required. Refer to Part C of Explorations under the General Education requirements section in the catalog.

The Major

Preparation for the Major. Africana Studies 140, Chicana and Chicano Studies 111A, or Communication 103; Africana Studies 120, Chicana and Chicano Studies 111B, or Rhetoric and Writing Studies 100; Africana Studies 200 or Rhetoric and Writing Studies 200; Astronomy 101, 109; Biology 100, 100L; Chemistry 200, 201; Geography 103; Geological Sciences 105, 200, 221, 224; Mathematics 150; Physics 180A, 180B, 182A, 182B **OR** Physics 195, 195L, 196, 196L, 197, 197L; Statistics 250. (61-66 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 36 units to include Geological Sciences 300, 303 (allowed only in this version of the major in Geological Sciences), 306, 498A, 498B, 501, 536, 537; Biology 319; Oceanography 541; and six units selected from Geological Sciences 307, 505, 508, 514, 520, 521, 530, 540, 545, or Geography 510; plus one departmentally approved upper division unit.

Additional Requirements for Subject Matter

Preparation Certification

Satisfactory Grades. At most one course with a C- or lower among the courses listed under Preparation for the Major, and at most one course with a C- or lower among the courses listed under the Major. If a course is repeated, the highest grade will count.

Formative Assessment. Completion of a satisfactory, preliminary portfolio two semesters prior to graduation. Contact the subject matter preparation adviser for information.

Summative Assessment. Completion of a satisfactory, final portfolio, and a positive recommendation from a committee consisting of the senior project supervisor, the Department of Geological Sciences chair, and the subject matter preparation program adviser.

Geological Sciences Minor

The minor in geological sciences consists of a minimum of 20 units in geological sciences, twelve of which must be in upper division courses. Courses include Geological Sciences 100, 101, 105; and twelve units selected from Geological Sciences 301, 302, 303, 304, 306, 307, 502, 505, 514, 536, 537. In addition, Geological Sciences 200, 221, and 224 are appropriate for geology minors.

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

LOWER DIVISION COURSES

100. Dynamics of the Earth (3) I, II

Geological processes that shape our planet. Plate tectonics used as framework to explore volcanoes, earthquakes, mountain building, glaciers, geologic time, natural resources, and environmental issues. Not open to students with previous credit in geological sciences.

101. Dynamics of the Earth Laboratory (1) I, II

Three hours of laboratory.

Prerequisite: Credit or concurrent registration in Geological Sciences 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. Not open to students with previous laboratory credit in geological sciences.

105. Historical Geology (4) I, II

Three lectures and three hours of laboratory. Arrangement for field study during the semester.

Prerequisites: Geological Sciences 100 and 101.

Theories of earth origin, and the evolutionary history of the earth as traced through rock and fossil records. Consideration of the paleontologic sequence.

200. Geologic Inquiry and Problem Solving (3) I

Two lectures and three hours of laboratory

Scientific thought process using real problems addressed by student research in field and laboratory. Includes written report and oral presentation.

221. Mineralogy (4) I

Three lectures and three hours of laboratory.

Prerequisites: Credit or concurrent registration in Geological Sciences 200; high school chemistry and trigonometry, or credit or concurrent registration in college chemistry and trigonometry.

Practice in determination of common minerals; their geologic environment, utilization, and economic significance. Introduction to optical techniques in mineral identification.

224. Petrology (4) II

Two lectures and six hours of laboratory.

Prerequisite: Geological Sciences 221.

The origin, occurrence, identification, and classification of rocks in hand specimen. Use of optical techniques in mineral identification.

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)

300. Computer Applications in Geology (3)

Two lectures and three hours of laboratory.

Programming and applications of software fundamentals to geological sciences. Applications software will include DOS, Windows, and Macintosh operating systems, word processing, spreadsheets, graphing, contouring, and drawing. Introduction to Internet and overview of geology-specific software. Not open to students with credit in Geological Sciences 201.

301. Geology of National Parks and Monuments (3) I, II

Prerequisites: Geological Sciences 100, and completion of the General Education requirement in Foundations II.A., Natural Sciences and Quantitative Reasoning.

Geology of a group of national parks and monuments, selected for their geological significance, scenic beauty, and visitor popularity. Not acceptable for a major in geological sciences.

302. Fossils: Life Through Time (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations II.A., Natural Sciences and Quantitative Reasoning.

Traditional and recently discovered aspects of history of life on earth. Topics from the origin of life to extinctions. Not acceptable for a major in geological sciences.

303. Natural Disasters (3) I, II

Prerequisite: Geological Sciences 100 or completion of the General Education requirement in Foundations II.A., Natural Sciences and Quantitative Reasoning.

Geologic processes that have dramatically affected the human race: earthquakes, volcanoes, landslides, and floods. Not acceptable for a major in geological sciences.

304. Planetary Geology (3)

Prerequisite: Completion of the General Education requirement in Foundations II.A., Natural Sciences and Quantitative Reasoning. Recommended: Geological Sciences 100.

Structure, evolution, and surface features of planets from a geological point of view. Insights gained into origin and evolution of planetary bodies provide greater understanding of how planet earth operates and why it is unique. Not acceptable for a major in geological sciences.

306. Structural Geology and Field Methods (5) I

Two lectures and three hours of laboratory and six weekends in the field.

Prerequisites: Geological Sciences 224, 300; 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. (Formerly numbered Geological Sciences 305 and 308.)

307. Geophysics and Field Methods (4) II

Two lectures and three hours of laboratory and a minimum of three weekends in field during semester.

Prerequisites: Geological Sciences 306; Mathematics 150; Physics 195 or 180A.

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. (Formerly numbered Geological Sciences 230 and 330.)

496. Selected Topics in Geology (1-4)

Prerequisite: Consent of instructor.

Selected topics in geology and related earth sciences. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum credit six units.

498A. Senior Seminar (1) Cr/NC I,II

Prerequisite: Senior standing in geological sciences.

Preparation of written and oral scientific reports and attendance at departmental seminars.

498B. Senior Thesis (2) I,II

Prerequisite: Consent of instructor.

Individual research project, written thesis, and oral presentation done under supervision of professor chosen by student.

499. Special Study (1-3) I,II

Prerequisites: Acceptable grade average in at least 12 upper division units within the major and consent of staff.

Individual study in field, library, laboratory, or museum work. Maximum credit four units.

UPPER DIVISION COURSES (Also Acceptable for Advanced Degrees)

501. Geochronology (3)

Two lectures and three hours of laboratory.

Prerequisite: Geological Sciences 224.

Survey of radiometric, chemical, stratigraphic, and paleomagnetic methods used to establish time in relationship to the history of the earth. Basis for correlation of geologic events and estimation of rates and periodicity of geologic processes.

502. Geology of North America (3) I

Prerequisite: Geological Sciences 105.

A regional analysis of North American geology, its structural, stratigraphic, and tectonic patterns, and hypotheses concerning their origin and evolution.

505. Photogeology and Remote Sensing (3) II

Two lectures and three hours of laboratory.

Prerequisite: Geological Sciences 514.

Geologic interpretation of aerial and satellite photographs, elementary stereoscopy and stereoetry applied to structural and stratigraphic problems, and compilation of geologic maps from annotated aerial and satellite photographs.

508. Advanced Field Geology (4 or 6) S

One lecture and three hours of laboratory plus 24 days in the field. For the option with six units: two additional weeks of field or laboratory work. Summer session can be enrolled in during the Spring semester.

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.

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.

516. Micropaleontology (3)

Two lectures and three hours of laboratory.

Prerequisite: Geological Sciences 537.

The morphology, classification, and geologic significance of various microfossil groups.

520. Ore Deposits (3) I

Prerequisite: Geological Sciences 306.

Geologic relations, origin, distribution, and economics of metallic and nonmetallic mineral deposits.

521. Petroleum Geology (3) II

Prerequisite: Geological Sciences 306.

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.

525. Petrography (3) I

Two lectures and three hours of laboratory.

Prerequisite: Geological Sciences 224.

A study of rocks with the polarizing microscope; identification of mineral constituents; interpretation of textures; classification of rocks; problems of genesis.

530. Geochemistry (2) I

Prerequisites: Geological Sciences 224; Chemistry 201; Mathematics 121 and 122, or 150.

Relationship of basic chemical principles and isotopic methods to geologic phenomena and environments. Applications to geologic exploration problems, contaminant transport, chemical weathering, and evolution of atmosphere and ocean chemistry.

530L. Geochemistry Laboratory (1) I

Three hours of laboratory.

Prerequisite: Credit or concurrent registration in Geological Sciences 530.

Laboratory methods for determination of chemical concentrations in waters, sediments, and rocks, as well as x-ray diffraction methods for mineralogy.

532. Applied Hydrogeophysics (3) I

Two lectures and three hours of laboratory.

Prerequisites: Mathematics 150 and Statistics 250; two semesters of physics. Recommended: Geological Sciences 307 and 551.

Applications of geophysical methods to hydrological investigations including d.c. resistivity, electromagnetics, radar, seismology, and magnetics.

533. Geophysical Analysis (3)

Two lectures and three hours of laboratory.

Prerequisites: Geological Sciences 307, Mathematics 252, Physics 197. Recommended: Physics 195L, 196L, 197L.

Analog and digital data collection, processing, modeling and error estimation. Computer-aided examples and field tests from seismics, gravity, magnetics, and electromagnetics including magnetotellurics.

536. Sedimentology and Lithostratigraphy (3) I

Two lectures and three hours of laboratory.

Prerequisites: Geological Sciences 105 (not required but recommended for Emphases in Geochemistry and Geophysics) and 224.

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. (Formerly numbered Geological Sciences 507 and 526.)

537. Paleontology and Biostratigraphy (3) II

Two lectures and three hours of laboratory.

Prerequisites: Geological Sciences 105 and either Biology 100-100L or 101-101L, and Geological Sciences 536.

Concepts and methods of paleontology and biostratigraphy. Introduction to fossil record of invertebrate taxa and applications to stratigraphic record. (Formerly numbered Geological Sciences 506 and 507.)

540. Marine Geology (3)

Prerequisites: Geological Sciences 105, and either Geological Sciences 224, 502, 514, or 537.

Plate tectonic origin and history of the ocean basins. Formation and distribution of sediments in response to biologic, chemical, and geologic processes.

545. Descriptive Physical Oceanography (3)

Prerequisites: Mathematics 121 and 122, or 150; Physics 180A or 195.

Physical environment of oceans including heat, water, and salt budgets, physical properties of sea water, sea ice, air-sea relationships, effects of light and sound, distribution of temperature, salinity, density, surface current, deep circulation, water mass formation, instruments and methods of study.

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.

551. Hydrogeology (3) I

Two lectures and three hours of laboratory.

Prerequisites: Geological Sciences 306 and Mathematics 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.

552. Field and Laboratory Techniques in Hydrogeology (4) II

One lecture and nine hours of laboratory.

Prerequisites: Geological Sciences 551 and credit or concurrent registration in Geological Sciences 530.

Use and application of common field and laboratory techniques in hydrogeology. Exercises include drilling, coring, and sediment sampling, aquifer testing, unsaturated zone monitoring, fluid level measurement, tracer testing, laboratory measurement of permeability, capillarity, and analysis of inorganic and organic constituents in groundwater.

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.

596. Advanced Topics in Geology (1-4)

Prerequisite: Consent of instructor.

Advanced special topics in the geological 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 of six units of 596 applicable to a bachelor's degree. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

German

In the College of Arts and Letters

OFFICE: Business Administration 304

TELEPHONE: (619) 594-6313

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EMAIL: german.coord@sdsu.edu

Faculty

Emeritus: Boney, Dunkle, Lawson, Paulin, Wulbern

Chair:

Professor: Skwara

Associate Professor: Wauchope

Lecturer: Novak

Offered by the Department of German and Russian Languages and Literatures

Major in German with the B.A. degree in liberal arts and sciences.

Emphasis in German studies.

Teaching major in German for the single subject teaching credential in foreign languages.

Major in international business, with emphasis in German. **See** International Business.

Minor 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 German-speaking countries.

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.

German Major

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 11031)

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, 200, 201, 202, and 210. (22 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Foreign Language Requirement. The foreign language requirement is automatically fulfilled through coursework for preparation for the major.

Major. A minimum of 24 upper division units to include German 301, 310, 420, and 15 units in upper division German which may include Comparative Literature 571 (content: *Faust*).

Emphasis in German Studies

No minor is required with this emphasis.

Preparation for the Major. German 100A, 100B, 200, 201, 202, and 210. (22 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Foreign Language Requirement. The foreign language requirement is automatically fulfilled through coursework for preparation for the major.

Major. A minimum of 30 upper division units to include German 301, 310, 420; six units of electives in German; 12 units (no more than six units in any one department) selected from Art 558, Economics 330, Geography 336, History 440, 517A, 517B, Humanities 320, 404, Philosophy 414, Political Science 356; and three units of electives selected with approval of department adviser.

German Major

In preparation for the Single Subject Teaching Credential in Foreign Languages

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 11031)

All candidates for a teaching credential must complete all requirements as outlined in this section of the catalog under Policy Studies or Teacher Education. For students completing the single subject teaching credential program, no more than 48 units in German courses can apply to the degree.

This major may be used by students in policy studies 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 German is required for the degree.

Preparation for the Major. German 100A, 100B, 200, 201, 202, and 210. (22 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Foreign Language Requirement. The foreign language requirement is automatically fulfilled through coursework for preparation for the major.

Major. A minimum of 27 upper division units in German to include German 301, 304, 310, 420, 505, and 12 upper division units in German.

Proficiency Examination: Before taking a student teaching assignment in German, the candidate for the credential may be required to pass an oral and written proficiency examination in the language, administered by the Department of German and Russian Languages and Literatures. The candidate should consult the chair of the department.

German Minor

The minor in German consists of a minimum of 15 units in German, nine of which must be in upper division courses in the language completed at San Diego State University.

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.

Foreign Language Requirement for the B.A. Degree in Liberal Arts and Sciences

Students electing the study of German to fulfill the foreign language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete German 200, 201, or 202 or the equivalent level of achievement. The usual sequence of coursework is German 100A, 100B, and 200, 201, or 202. Refer to section of catalog on "Graduation Requirements" for additional ways to satisfy competency.

High School Equivalent

High school foreign language courses may be used for purposes of placement in college courses and may be counted toward meeting the foreign 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, although students with fewer than three years of high school level language may complete the first semester college course for graduation credit.

2. The first *three years* of high school level language count as the equivalent of the first two college semesters, although students with fewer than four years of high school level language may complete the second semester college course for graduation credit. Students who have completed three years of foreign language in high school will not receive credit for the first semester college course unless at least five years separate the last high school course and the first college course.

3. *Four years* of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the foreign language requirement.

Courses

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.

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, the 200 series, and 301 taken out of sequence.

100A. First Course in German (5) I, II (CAN GERM 2) (100A + 100B: CAN GERM SEQ A)

Pronunciation, oral practice, readings on German culture and civilization, minimum essentials of grammar. Not open to students who have completed three years of high school German unless the third course was completed five or more years ago.

100B. Second Course in German (5) I, II (CAN GERM 4) (100A + 100B: CAN GERM SEQ A)

Prerequisite: German 100A or two years of high school German.

Continuation of German 100A. Not open to students who have completed four years of high school German unless the fourth course was completed five or more years ago.

200. German for Oral Proficiency (3)

Three lectures and one hour of laboratory.

Prerequisite: German 100B or three years of high school German.

Practice in spoken language; use of modern German through study of cultural materials for proficiency in oral communication. Recommended for students wanting to satisfy the foreign language requirement for the Bachelor of Arts degree in liberal arts and sciences.

201. Grammar Through Writing (3)

Prerequisite: German 100B or three years of high school German.

Developing intermediate level writing skills through a review of basic grammatical structures of spoken and written German and introduction of new structures.

202. German for Reading Comprehension (3)

Prerequisite: German 100B or three years of high school German.

Reading in German with emphasis on comprehension. Not open to students with credit in German 200B.

210. Writing German (3)

Prerequisite: German 201 with a grade of C or better.

Practice in German language skills at intermediate level with emphasis on writing of paragraphs and short essays. Discussions in German. May be taken concurrently with German 200 and/or 202.

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.

301. Grammar and Composition (3)

Prerequisites: German 200, 201, 202, 210; and completion of the General Education requirement in Foundations II.C., Humanities required for non-majors. **Proof of completion of prerequisites required:** Copy of transcript.

Grammar and stylistics; intensive writing practice; reports based on outside reading.

303. Business German (3)

Three lectures and one hour of laboratory.

Prerequisites: German 301 and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

German language and culture within context of German business and economics. Extensive readings and listening comprehension exercises. Practice in both speaking and writing German.

304. Phonetics of Spoken German (3)

Three lectures and one hour of laboratory.

Prerequisites: German 200, 201, 202, and 210.

Sounds and intonation of German.

310. Introduction to German Literature (3)

Prerequisites: German 200, 201, 202, and 210; and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

Introduction to literary study in German, with selected readings representative of different periods and genres.

320. German Film (3)

Two lectures and two hours of activity.

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

Masterpieces of German film. Emphasis on social, political, and cultural changes in modern Germany. Taught in English.

420. Modern German Civilization (3)

Prerequisites: German 200, 201, 202, and 210.

Culture of German-speaking countries in the nineteenth and twentieth centuries.

496. Experimental Topics (1-4)

Prerequisites: German 310 (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.

499. Special Study (1-3) I, II

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)

501. Translation (3)

Prerequisite: German 301.

Translation of a variety of texts from German to English and English to German.

505. Applied German Linguistics (3)

Prerequisite: German 301 or consent of instructor.

Linguistic study of modern German; integration of modern linguistic theory with the language classroom.

520. Modern German Literature (3)

Prerequisite: German 310.

Major authors and genres since Enlightenment.

530. Topics in German Literature (3)

Prerequisite: German 310.

Study of a movement, theme or genre of German literature, such as Romanticism, literature and film, literature of the Holocaust, women's literature, literature of the German Democratic Republic in retrospect. May be repeated with new title and content. See Class Schedule for specific content. Maximum credit six units.

596. Topics in German Studies (3)

Prerequisite: German 310 (for literary topics) or 505 (for linguistics topics). **Proof of completion of prerequisite 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. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES Refer to Bulletin of the Graduate Division.

Gerontology

In the College of Health and Human Services

OFFICE: Hepner Hall 203
TELEPHONE: (619) 594-6989
FAX: (619) 594-2811

Faculty

Gerontology is a multidisciplinary program administered through the University Center on Aging. Faculty assigned to teach courses in gerontology are drawn from the Departments of Anthropology, Psychology, Recreation, Parks and Tourism, and Sociology; the School of Social Work; and the Colleges of Arts and Letters, Education, Health and Human Services, and Professional Studies and Fine Arts.

Director: Stanford
Professor: Stanford
Lecturer: DuBois

Offered by Gerontology

Major in gerontology with the B.A degree in liberal arts and sciences.
Minor in gerontology.
Certificate in applied gerontology (offered only in Extension).

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 multidisciplinary in nature. Gerontology is becoming a major area of research in the biological, behavioral, and social sciences.

Every day there is a net increase of 1,000 Americans 65 years of age and over. This is an increase of more than 3,500,000 elderly persons per year. With this striking increase 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.

One of the primary goals of the gerontology program is to provide students with a broad base for comprehensive understanding of the impact of society's changing demographics on every aspect of their social and work lives. 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.

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.

Gerontology Major

With the B.A Degree in Liberal Arts and Sciences
Major Code: 21043

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; Community Health Education 101; Psychology 101; and Social Work 110. (21 units)

Foreign 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."

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units to include Gerontology 350, 360, 370, 400A, 400B, 402, 520; Psychology 350; Social Work 420*; Sociology 350 or 527; and six units selected with approval of the adviser from Anthropology 509; Child and Family Development 335 and 381; Communicative Disorders 580; Gerontology 496, 499, 522, and 596 (when appropriate); Exercise and Nutritional Sciences 433; Psychology 456; Recreation 580; Sociology 528; Women's Studies 310, 521.

* Prerequisites waived.

Gerontology Minor

The minor in gerontology consists of a minimum of 18 units to include Psychology 350, Sociology 350 or 527; and 12 units selected from Gerontology 101, 350, 360, 370, 400A, 400B, 402, 499, 522, 596; Anthropology 509; Child and Family Development 496*; Communicative Disorders 580; Exercise and Nutritional Sciences 433; Recreation 580; Social Work 120, 420; Sociology 496*; and Women's Studies 521.

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.

* When relevant.

Certificate in Applied Gerontology

(Offered only in Extension)

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 University Center on Aging 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 center is responsible for the coordination of the certificate program in conjunction with the College of Extended Studies. Admission applications may be obtained from the University Center on Aging. 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 University Center on Aging.

Required Courses for the Certificate Program

A minimum of 12 semester units must be selected from the following five areas inclusive of the practicum:

I. Introduction to Gerontology

Gerontology 101. Introduction to Human Aging (3)

II. Biological and Health Aspects of Aging

Anthropology 509. Culture and Biological Aging (3)

III. Psychological Aspects of Aging

Psychology 350. Abnormal Psychology (3)

IV. Sociological Aspects of Aging

Gerontology 250. Intergenerational Issues and the Elderly (3)

Gerontology 350. Social Policy and Aging (3)

V. Practicum

Gerontology 400A-400B. Practicum in Gerontology (3) (Cr/NC)

Elective Courses

A minimum of six semester units selected from the following:

Gerontology 360. Minority and Ethnic Aging (3)

Gerontology 370. Images of Aging in Contemporary Society (3)

Gerontology 496. The Aging Network (3)

Gerontology 499. Special Study (1-3)

Gerontology 520. An Inside Look at Aging Programs—Program Analysis (3)

Gerontology 596. Advanced Special Topics in Gerontology (1-4)

Recreation 580. Leisure and the Aging Process (3)

Women's Studies 310. Women in Cross-Cultural Perspective (3)

Women's Studies 521. Life Cycles of Women (3)

Courses

LOWER DIVISION COURSES

101. Introduction to Human Aging (3) I, II

Overview of the field of gerontology, including demographic trends, basic theories, concepts and philosophic ideas, social policies, planning issues, and services available to meet the needs and problems of the aged.

250. Intergenerational Issues and the Elderly (3)

Controversial issues surrounding interpersonal relations between the aged and other age groups.

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)**

350. Social Policy and Aging (3) II

Prerequisite: Gerontology 101.

Philosophical and practical gerontological knowledge for the operation of health and human service organizations. Multiprofessional perspective of policies, services, and administrative techniques.

360. Minority and Ethnic Aging (3) I

Prerequisite: Gerontology 101.

Attitudes and cultural values related to aging members of ethnic minorities. Major social and psychological theories on aging as they relate to ethnic minority elderly. Impact of class, economic resources, and health on the aging process.

370. Images of Aging in Contemporary Society (3) II

Prerequisite: Gerontology 101.

Images of older persons in our society. Influence of films, newspapers, radio, television, books and magazines, and a wide range of advertising mechanisms.

400A-400B. Practicum in Gerontology (3-3) Cr/NC I, II

Twelve hours of laboratory.

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.

402. The Aging Network (3) I, II

Prerequisite: Three units in gerontology.

Current status of aging services in the community. Evaluation of effectiveness of programs and services to maintain elderly in the community.

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.

499. Special Study (1-3)

Prerequisite: Consent of department chair.

Individual study. Maximum credit six units.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

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.

522. International Issues on Aging (3)

Prerequisite: Three units in gerontology.

Socio-economic implications of rapidly growing number and proportion of older people around the world. Comparative study of aging populations in different countries, analysis and evaluation of related policies and programs.

596. Advanced Special Topics in Gerontology (1-4) I, II

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 or master's degree. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

Greek

Refer to "Classics" in this section of the catalog.

Health Science

Refer to "Community Health Education" in this section of the catalog.

Hebrew

In the College of Arts and Letters

OFFICE: Business Administration 327
TELEPHONE: (619) 594-5268
FAX: (619) 594-4877

Faculty

Chair: Choi
Professor: Bar-Lev

Offered by the Department of Linguistics and Oriental Languages

Courses in Hebrew.
Major or minor work in Hebrew is not offered.

Foreign Language Requirement for the B.A. Degree in Liberal Arts and Sciences

Students electing the study of Hebrew to fulfill the foreign language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Hebrew 201 or the equivalent level of achievement. The usual sequence of coursework is Hebrew 101 (with 100), 102, and 201. Refer to section of catalog on "Graduation Requirements" for additional ways to satisfy competency.

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 foreign 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, although students with fewer than three years of high school level language may complete the first semester college course for graduation credit.
2. The first *three years* of high school level language count as the equivalent of the first two college semesters, although students with fewer than four years of high school level language may complete the second semester college course for graduation credit. Students who have completed three years of foreign language in high school will not receive credit for the first semester college course unless at least five years separate the last high school course and the first college course.
3. *Four years* of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the foreign language requirement.

Courses

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.

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.

“The future belongs to those who believe in the beauty of their dreams.”

— Eleanor Roosevelt

101. Elementary Hebrew I (3)

Three lectures and one hour of laboratory.

Beginning reading, writing, and conversational skills. Essentials of grammar. Not open to students who have completed three years of high school Hebrew unless the third course was completed five or more years ago.

102. Elementary Hebrew II (4)

Four lectures and one hour of laboratory.

Prerequisite: Hebrew 101.

Continuation of Hebrew 101. Not open to students who have completed four years of high school Hebrew unless the fourth course was completed five or more years ago.

201. Intermediate Hebrew (4)

Four lectures and one hour of laboratory.

Prerequisite: Hebrew 102.

Continuation of Hebrew 102. Applications of grammar and reading skills. Additional practice in conversation.

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.

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.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

History

In the College of Arts and Letters

OFFICE: Adams Humanities 4210
TELEPHONE: (619) 594-5262
FAX: (619) 594-2210
EMAIL: pmason@mail.sdsu.edu

WWW: <http://www-rohan.sdsu.edu/dept/histweb/dept.html>

Faculty

Emeritus: Coox, Cox, Dufault, Filner, Flemion, Hanchett, Heinrichs, Munter, Norman, Peterson, Pincetl, Rader, Rohfleisch, Schatz, Smith, C., Smith, R., Steele, Stoddart, Strong, Vanderwood, Webb

Chair: McDean

The Dwight E. Stanford Chair in American Foreign Relations:
Cobbs Hoffman

The Nasatir Professor of Modern Jewish History: Baron
Professors: Baron, Cheek, Chu, Cobbs Hoffman, Cunniff, Davies, Dunn, Ferraro, Hamilton, Heyman, Hoidal, Kornfeld, Kushner, McDean, O'Brien, Starr, Stites, Vartanian

Associate Professors: Bartholomew, Colston, Colwill, Oades, Polich, Roberts

Assistant Professors: Kuefler, Rivera-Garza, Wiese

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 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 is now held by a distinguished scholar of European intellectual history and Holocaust studies, Lawrence Baron, director of SDSU's Lipinsky Institute for Judaic Studies.

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 Elizabeth Cobbs Hoffman, a distinguished scholar-teacher who is an expert on the economic impact of the United States in Latin America and on the development of the United States Peace Corps.

The Major

History is the study of humanity's recorded past. It encompasses almost all aspects of human activity and behavior. The arts and sciences, technology and economics, ideology and social attitudes are all as much a part of history as politics and war.

History is the most universal of the humanities. It is not merely a body of facts to be learned, but is a series of arguments and points of view to be debated. Study of the ideas, attitudes, and actions of peoples in the past helps to sharpen a person's own sense of values, offering moral lessons in the search for a global future of creative achievement and international peace. It also helps to cultivate a more tolerant and compassionate spirit toward peoples whose way of life may be different from one's own.

The excellent training in basic skills and the broad range of information students receive in history courses prepare history majors for

a wide variety of careers in law, government, politics, journalism, publishing, and public history. Teaching at the high school, community college, or university level offers increasing opportunities for history majors in the future.

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.

History Major

**With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 22051)**

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. Twelve units selected from two of the following sequences: History 100-101; 105-106; 110A-110B; 115A-115B.

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. History 430W with a grade of C (2.0) or better.

Major. A minimum of 30 upper division units in history to include History 430W and a minimum of six units in each of three of the following fields: (a) Ancient, Medieval and Early Modern Europe; (b) Modern Europe; (c) United States; (d) Latin America; (e) South, Southeast, and East Asia; (f) Africa and the Middle East; (g) Topical Subjects; plus nine units of electives. It is the student's obligation to determine which courses fulfill his/her field requirements.

History Minor

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, 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 430W. Interested students should consult the undergraduate adviser in the History Department.

Courses

LOWER DIVISION COURSES

100. World History (3)

The growth of civilizations and the interrelationships of peoples of Europe, Asia, Africa, and America to 1650.

101. World History (3)

Modern history from a global perspective, 1650 to the present.

105. Western Civilization (3) (CAN HIST 2)

(105 + 106: CAN HIST SEQ A)

Development of European culture, thought and institutions from ancient times through the seventeenth century. Not open to students with credit in History 305A.

106. Western Civilization (3) (CAN HIST 4)

(105 + 106: CAN HIST SEQ A)

Development of modern societies and states to the present day. Not open to students with credit in History 305B.

110A-110B. American Civilization (3-3)

(110A: CAN HIST 8) (110B: CAN HIST 10)

(110A + 110B: CAN HIST SEQ B)

Political and social development of the United States, with emphasis on American civilization and ideals. History 110A: From colonial period to 1877. History 110B: Since 1877. Primarily for lower division students. This year course satisfies the graduation requirement in American Institutions.

115A-115B. Comparative History of the Americas (3-3)

Western hemisphere from ancient times to present, with focus on interactions among European, American Indian, and African-American cultures, institutions, and traditions. History 115A: Ancient American civilizations, European colonial systems, creation of new nations. History 115B: Nations and cultures of the Americas since independence. This year-long course satisfies the graduation requirement in American Institutions.

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.

299. Special Study (3)

Prerequisite: Consent of department chair and instructor.
Individual study.

UPPER DIVISION COURSES (Intended for Undergraduates)

305A-305B. Sources of Western Civilization (3-3)

Prerequisites: Open only to upper division students, and completion of the General Education requirement in Foundations II.C., Humanities.

Important ideas and attitudes which have shaped Western civilization since ancient times. Emphasis on cultural themes rather than a political continuum. History 305A: Origins of Western civilization through the seventeenth century. History 305B: Western civilization from the seventeenth century to the present. Not open to students with credit in History 105 and 106. May not be used to satisfy requirements for the major or minor.

308. History of Britain (3)

Prerequisite: Upper division standing.

Survey of British history from its origins to the contemporary age. Emphasis on political institutions, religion, society, economy, the arts. Cannot satisfy requirements for the major or minor; offered only in London Semester program.

310A-310B. United States History (3-3)

Survey of American history. History 310A: From colonial period to 1877. History 310B: Since 1877. Designed primarily for students seeking upper division elective or graduation requirement in American Institutions. Not open to students with credit in History 110A or 110B. May not be used to satisfy requirements for the major or minor.

411. World History for Teachers (3)

Prerequisites: Upper division standing, satisfactory completion of Writing Competency requirement, and at least three units selected from History 100, 101, 105, 106, 115A or 115B.

Topics in world history from paleolithic times to eighteenth century emphasizing cooperative 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.

412. Perspectives on Modern World History (3)

Prerequisites: Upper division standing, satisfactory completion of Writing Competency requirement, and at least three units selected from History 100, 101, 105, 106, 115A or 115B.

Topics in modern world history emphasizing world-scale patterns of change, cross-cultural comparison and conceptual frameworks. Of special interest to students preparing to teach history in secondary schools.

430W. The Writing of History (3) I, II

Prerequisites: Satisfies University Upper Division Writing requirement for students who have completed 60 units, fulfilled the Writing Competency requirement, and completed the General Education requirement in Communication and Critical Thinking. **Proof of completion of prerequisites required:** Test scores or verification of exemption; copy of transcript.

Historical method and research in some aspect of history. (Formerly numbered History 430.)

490. Senior Honors Thesis (3) I, II

Prerequisite: History 430W; 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 adviser, and completion of a senior honors thesis. Required of students wishing to graduate with a certificate of recognition in history.

499. Special Study (1-3) I, II

Prerequisite: Consent of department chair and instructor.
Individual study. Maximum credit six units.

Field (a). Ancient, Medieval, and Early Modern Europe

UPPER DIVISION COURSE (Intended for Undergraduates)

496. Issues in History (1-4)

Refer to Field (g). Topical Subjects.

UPPER DIVISION COURSES (Also Acceptable for Advanced Degrees)

500A-500B. Ancient History (3-3)

Semester I: Greece to the Roman Conquest. Semester II: Rome to the fifth century A.D.

501. History of Ancient Near Eastern Civilizations (3)

Major civilizations of Near East from the origin of civilization to Roman Conquest, including Egyptians, Babylonians, Hebrews and Persians. Social, political, and religious problems.

503A-503B. Europe in the Middle Ages (3-3)

European social, cultural, and political developments from the fall of Rome to the Renaissance.

506. The Renaissance (3)

The intellectual, artistic, and social transformation of Europe from the fourteenth through the early sixteenth century.

507. The Reformation (3)

Continental Europe in the sixteenth century; split of Christendom, the religious wars, national rivalries, the expansion of Europe and the beginnings of the scientific revolution.

513A. Early Scandinavia (3)

The formation and development of the Scandinavian kingdoms from the Viking Age to the end of the Napoleonic Wars.

Field (b). Modern Europe

UPPER DIVISION COURSES (Intended for Undergraduates)

407A-407B. Modern Europe (3-3) I, II

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

History of Europe from the Renaissance to the present. Social, economic, and intellectual trends, the development of the nation-state, and the reasons for continental conflict. Semester I: The Renaissance to 1789. Semester II: The French Revolution to contemporary times.

496. Issues in History (1-4)

Refer to Field (g). Topical Subjects.

UPPER DIVISION COURSES (Also Acceptable for Advanced Degrees)

510. Europe's Age of Enlightenment (3)

Prerequisite: Upper division standing.

Selected problems in the social, cultural, and intellectual history of the eighteenth-century Enlightenment.

511A. The Age of European Revolution (3)

Major economic, social, intellectual, and political changes in Europe from 1789 to 1848. Effects of French Revolution, Industrial Revolution, and Romanticism on European history.

511B. The Age of Nationalism in Europe (3)

Economic, social, and intellectual developments in Europe from 1848 to 1890 that contributed to the age of nation building.

512A. The Great War: A Turning Point in European History (3)

Forces and events that shaped Europe in period prior to and during World War I, 1890-1919.

512B. The Age of Dictators and Contemporary Europe (3)

Europe in the age of dictatorship, world war, decline, and recovery.

513B. Modern Scandinavia (3)

Major political, social and economic developments in Scandinavia from 1814 to the present, with emphasis on contemporary society.

514. The French Revolution and Napoleonic Era (3) I

Prerequisites: History 105 and 106.

France on the eve of the Revolution; the Great Revolution, 1789-1799, the Napoleonic Era. (Formerly numbered History 514A.)

517A-517B. Modern Germany (3-3)

Political, social, and economic history of Germany. Semester I: From the Reformation to the outbreak of World War I. Semester II: 1914 to the present.

518A-518B. Russia and the Soviet Union (3-3)

Semester I: Political, social and economic development of Russia in Europe and Asia from the earliest times to the close of the nineteenth century. Semester II: Emphasis on the twentieth century.

519. Modern Italy (3)

The development of Italy from 1815 to the present.

522A-522B. Tudor and Stuart England (3-3)

Semester I: The Age of the Tudors. Semester II: England during the Stuart Dynasty, 1603-1714.

526. Ideas and Attitudes of Modern Europe (3)

Selected problems in European intellectual history beginning with the seventeenth century, with attention to social and political thought. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

528. Social History of Modern Europe (3)

Historical survey of European society emphasizing changes in the family, health, diet, the standard of living, urbanism, crime, migration, and literacy, from 1350 to the beginning of the Industrial Revolution.

Field (c). United States

UPPER DIVISION COURSES (Intended for Undergraduates)

410A-410B. United States History for Teachers (3-3)

Prerequisite: History 410A is prerequisite to History 410B.

United States history with emphasis on historiography, bibliography, and relationship between philosophy of history and teaching. History 410A: From colonial period to 1877. History 410B: Since 1877. Intended primarily for students in teacher preparation programs. This year course satisfies the graduation requirement in American Institutions. Not open to students with credit in History 310A-310B.

442A-442B. People Out of Our Past (3-3)

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

A biographical approach to American history. Semester I: Through 1865; John Winthrop, Benjamin Franklin, Thomas Jefferson, P.T. Barnum, Lucy Stone, Frederick Douglass, John Brown, Abraham Lincoln. Semester II: 1865 to present; Mark Twain, Jane Addams, Emma Goldman, Woodrow Wilson, Henry Ford, Eleanor Roosevelt, Martin Luther King, Jr., Bob Dylan, Richard Nixon.

445. The City in U.S. History (3)

Prerequisites: Upper division standing and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

Historical approach to urbanization of American society since 1800, with emphasis on forces responsible for change over time. Topics include immigration, race, gender in the city, suburbanization, sun-belt cities, public policy, and urban environment.

496. Issues in History (1-4)

Refer to Field (g). Topical Subjects.

UPPER DIVISION COURSES (Also Acceptable for Advanced Degrees)

530. Colonial America (3)

Settlement and development of the English colonies in North America through the mid-eighteenth century. Contact of cultures, social structure, labor systems, religion, popular values, problems of imperial control, and political culture.

532. Topics in Early American History (3)

Prerequisites: Upper division 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. Not open to students with credit in History 531, "American Revolution."

533A. The Jacksonian Era (3)

Territorial expansion, democratic politics, revivalism, and the slavery controversy.

533B. Civil War and Reconstruction (3)

The Civil War and Reconstruction, emphasizing political affairs and the role of Lincoln.

535A. The Age of Reform (3)

The United States from the 1890s to the Crash of 1929.

535B. The Age of Roosevelt (3)

The United States in Depression, War, and Cold War.

536. The United States Since World War II (3) I, II,

Major foreign and domestic issues confronting the United States, and the government policies and popular movements generated in response.

539. Topics in the History of the American West (3)

Prerequisites: Upper division 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.

540. Environmental History of the United States (3)

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.

541A-541B. California (3-3)

Political institutions; social, cultural, economic and intellectual development; international background. Semester I: To 1850; Spanish and Mexican heritage. Semester II: 1850 to the present. History 541B satisfies the graduation requirement in California State and Local Government.

543. American Involvement in Vietnam 1941-75 (3)

Prerequisites: Upper division standing and six units in history.

Causes and costs of America's longest war: the war's beginning, United States involvement, role of media and antiwar movement, American withdrawal, impact of war on Southeast Asia and the United States.

544A-544B. American Foreign Policy (3-3)

History 544A: Development of American foreign policy from Colonial Period to the First World War. History 544B: Developments from First World War to present. This year course satisfies the graduation requirement in American History.

545A-545B. Constitutional History of the United States (3-3)

Development of American constitutional ideals and institutions. History 545A: Seventeenth century to 1861. History 545B: Since 1861. This year course satisfies the graduation requirement in American History or United States Constitution.

546A-546B. Development of American Capitalism (3-3)

The changes in agriculture, industry, labor, banking, transportation and commerce in a capitalist society with emphasis on the prominent personalities who made the changes possible.

547A-547B. Intellectual History of the American People (3-3)

American thought since colonial times, focusing on the ideas of individuals, groups and movements in religion, politics, society, the arts and reform. Emphasis on liberal and conservative impulses and their role in the making of the modern American mind. History 547A: To 1865. History 547B: Since 1865. This year course satisfies the graduation requirement in American Institutions.

548A-548B. Social History of the United States (3-3)

Historical survey of American society emphasizing demographic trends, the changing role of the family, social structure, immigration patterns, religious movements, developments in education, the economy, and entertainment.

549. History of San Diego (3)

Prerequisites: Upper division standing and six units in history.

Development of San Diego from European contact to the present.

Field (d). Latin America**UPPER DIVISION COURSES
(Intended for Undergraduates)****415A-415B. Latin America (3-3)**

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

Semester I: Colonial Period to approximately 1825. Semester II: Republican Latin America.

496. Issues in History (1-4)

Refer to Field (g). Topical Subjects.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)****551A-551B. Mexico (3-3)**

Prerequisite: History 115A-115B or 415A-415B.

Semester I: Colonial and modern Mexico. Semester II: Emphasis on the twentieth century.

552. Brazil (3)

Survey of history of Brazil from Portuguese backgrounds to present. Brazil as a tropical society. Recommended for students minor-ing in Portuguese.

554. The Andean Republics of South America (3)

The historical development of Chile, Bolivia, Peru and Ecuador with emphasis on race relations and social revolutions in the twentieth century.

555. Modernization and Urbanization in Latin America (3)

Historical treatment of the phenomena of urbanization and modernization in Latin America with attention to pre-Colombian and Iberian traditions and influence of education, church, military, and foreign investment.

556. Guerrilla Movements in Latin America (3)

History of sociopolitical conditions which culminated in guerrilla movements in twentieth century Latin America. Use of guerrilla writings and accounts as well as recent Latin American films and U.S. Defense Department counterinsurgency training films.

557. History of Latin American Popular Culture and Social Thought (3)

Examination of the ways Latin Americans have historically viewed their cultures and societies from the dual perspective of elites and the masses.

Popular culture—the Latin American self-image reflected in family relations, folklore, myth, legend, popular music and art and mass expression.

558. Latin America in World Affairs (3)

History of Latin America's political and economic relations with Europe, the Soviet Union, the United States, and the Third World.

559. Central America (3)

Prerequisites: Upper division standing and six units in history.

Historical development of the republics of Central America with emphasis on twentieth century. Contemporary revolutionary movements and role of United States in Central American affairs.

Field (e). South, Southeast and East Asia**UPPER DIVISION COURSES
(Intended for Undergraduates)****420. Asia's Dynamic Traditions (3)**

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

Emergence and continuing vitality of historic traditions in India, China, and Japan. Topical, comparative survey emphasizing Confucian, Buddhist, and Hindu ideas and the interaction with institutions of family and village.

421. Asia's Emerging Nations (3)

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

Historic changes which have contributed to the rise of modern Japan, India, and China. Topical, comparative approach emphasizing ways Asian societies have responded to challenges of imperialism, nationalism, revolution, war, and modernization.

422. Southeast Asian and Filipino Experience in America (3)

Prerequisite: Completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors. Prerequisite recommended: Upper division standing.

History of Filipinos and other Southeast Asians in America from 1898 to present. Topics include changing Southeast Asian-U.S. relations, cultural roots, immigration, comparative community institution and development, racism, discrimination, labor movements, politics, achievements, and contemporary issues.

496. Issues in History (1-4)

Refer to Field (g). Topical Subjects.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

561. Asia and the West (3)

History of twentieth century Asian-Western relations with emphasis on China and Japan. (Formerly numbered History 561B.)

564A-564B. Southeast Asia (3-3)

Semester I: Cultural traditions of Southeast Asian peoples. Indigenous institutions and the influence of China, India, and Islam. Semester II: Southeast Asia in the modern world. Patterns of foreign stimulus and local response among the peoples of the area.

565. Revolution and Social Change in Asia (3)

Comparative study of contemporary problems in Asia emphasizing how indigenous peoples responded to the challenges of nationalism, reform, revolution, modernization, and neo-colonialism. Topics include social structure, education, peasant movements, urbanization, search for cultural identity, and national integration.

566. Chinese Civilization: The Great Traditions (3)

China's institutional and cultural development from ancient to pre-modern times. Emphasis on traditional philosophy, religions, literature, and the arts.

567. China's Century of Modernization (3)

China's modernization process from the early nineteenth-century Opium War through the People's Republic of China.

569. Japanese Civilization (3)

Japanese internal history and institutions during the period of indigenous development and Chinese influence including religions, philosophy, literature, and the arts.

570. Modern Japan (3)

Japan's development as a modern state, particularly in the nineteenth and twentieth centuries.

Field (f). Africa and Middle East

**UPPER DIVISION COURSES
(Intended for Undergraduates)**

473A-473B. Middle Eastern History from the Rise of Islam to the Present (3-3)

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

Semester I: Islamic civilization in the imperial ages, A.D. 600 to A.D. 1600. Semester II: Colonialism and nationalism in the modern Middle East, A.D. 1600 to present.

475A-475B. Africa (3-3)

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

Semester I: Civilization of precolonial Africa both north and south of the Sahara from the advent of Islam to 1880. Semester II: Colonial and postcolonial Africa.

496. Issues in History (1-4)

Refer to Field (g). Topical Subjects.

**UPPER DIVISION COURSE
(Also Acceptable for Advanced Degrees)**

574. The Arab-Israeli Question, Past and Present (3)

Arab-Israeli conflict over Palestine in perspective of Zionism, Arab nationalism, and Great Power relations from nineteenth century to present.

Field (g). Topical Subjects

**UPPER DIVISION COURSES
(Intended for Undergraduates)**

402. History of Childhood (3)

Prerequisites: Upper division standing. Completion of the General Education requirement in Foundations II.C., Humanities required.

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.

406. History of Sexuality (3)

Prerequisite: Upper division standing and completion of General Education requirements in Foundations II.C. Humanities required.

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.

435. History Through Film (3)

Critical analysis of selected historical problems, eras, and events, using film as the principal historical document. Maximum credit six units.

440. The Holocaust and Western Civilization (3) I

Prerequisites: Upper division standing, and completion of the General Education requirement in Foundations II.C., Humanities.

German campaign to eliminate Jews during World War II. Anti-Semitic background, both Christian and racial; rise of Adolf Hitler and implementation of "the final solution"; responses by Jews and non-Jews in the Western world.

441. Environmental Problems in Historical Perspective (3)

Prerequisites: Upper division standing, and completion of the General Education requirement in Foundations II.C., Humanities.

A comparative study of 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.

480. History of Corporations in the Modern World (3) I, II

Prerequisites: Upper division standing, and completion of the General Education requirement in Foundations II.C., Humanities.

Comparative study of the rise and success of the modern corporation in the United States, Japan, Europe, and developing nations.

484. The Rise of Modern Science (3)

Historical development of scientific ideas from Ancient Greece to the Scientific Revolution of the seventeenth century, concentrating on interaction between science and other aspects of society such as politics, economics, religion, and technology.

485. Science and the Modern World (3)

From Newton to Einstein, from Darwin to DNA: modern development of interaction between science and other aspects of society such as politics, economics, philosophy, religion, and technology.

486. World War II (3)

Causes of World War II, its course, and its legacy for today's world.

488. Modern Jewish History (3) II

Prerequisites: Upper division standing, and completion of the General Education requirement in Foundations II.C., Humanities.

Social, religious, and intellectual life of European Jewry from Middle Ages to present; political struggle for emancipation; anti-Semitism, the Holocaust, and establishment of state of Israel.

494. Historians and the Public (3)

Prerequisites: Upper division standing and nine units in history.

How historians preserve, research, and interpret past for public audiences outside classroom. Topics include historic preservation projects, parks, museums, archives, and living history programs.

495. Internship in Applied History (3)

Nine to ten hours.

Prerequisites: Nine units in history. History 494 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.

496. Issues in History (1-4)

Examination of selected problems and current issues in history. May be repeated with change of content. Maximum credit six units with change of content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Refer to Class Schedule for specific content.

- | | |
|--|---|
| A. Ancient, Medieval, and Early Modern Europe | E. South, Southeast, and East Asia |
| B. Modern Europe | F. Africa and Middle East |
| C. United States | G. Topical Subjects |
| D. Latin America | |

499. Special Study (1-3) I, II

Prerequisite: Consent of department chair and instructor. Individual study. Maximum credit six units.

**UPPER DIVISION COURSE
(Also Acceptable for Advanced Degrees)**

596. Selected Studies in History (1-4)

Topics in the various fields of history, such as biography, war, science, technology, urbanization, minority groups, immigration, and capitalism. 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. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree

**GRADUATE COURSES
Refer to Bulletin of the Graduate Division.**

Humanities

In the College of Arts and Letters

OFFICE: Adams Humanities 4231
TELEPHONE: (619) 594-5186
FAX: (619) 594-1004

Faculty

Chair: Genovese
Professors: Eisner, Genovese, Skwara
Associate Professor: Cutter

Offered by the Department of Classics and Humanities

Major in European studies with the B.A. degree in liberal arts and sciences.

Major in humanities with the B.A. degree in liberal arts and sciences.

Emphasis in European humanities.

Minor in European studies.

Minor in humanities.

The Majors

European Studies. The European studies major approaches Europe as a unique heritage of values, traditions, problems, and resources. Although based in the Department of Classics and Humanities, this curriculum provides a multidepartmental balance among the humanities, foreign languages, history, and the social sciences. Majors center their studies on a modern continental European language and two series of courses in European humanities and history. They also take courses in political science, geography, economics, philosophy, and women's studies. As seniors, European studies majors produce a special study project that reflects their interest and knowledge in European humanities, history, economics, or political science.

European studies is a broadening interdisciplinary that serves the general purposes of a liberal arts degree, but it can also provide the base for a narrower focus for careers abroad or in European-centered arts, communication, or commerce. The major provides especially apt preparation for work in international travel and diplomacy. Also, with some carefully chosen additional coursework outside of the major, graduate study in any of the major's disciplines is an option.

European studies majors have at their disposal the audiovisual library of the Schaber Humanities Center and the facilities of the Burnett Classics Seminar Room, and they benefit from close faculty advising and the fellowship of a small department with a diverse curriculum.

Humanities. As academic pursuits, the humanities comprise all uniquely human accomplishments. Founded in history, they are the studies of the artistic and intellectual traditions of civilized peoples. This includes language, literature, philosophy, religion, and the arts. The goal of the humanities major is an interdisciplinary understanding of peoples and their times through the accomplishments that portray and articulate 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 audiovisual library of the Schaber Humanities Center and the use of the Burnett Classics Seminar Room. 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 the history, ideas, and the arts, humanities majors are prepared for various careers. They might find opportunities in communication, diplomacy, or commerce. One might become 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.

European Studies Major

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 03101)

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 European Studies shall submit to the department a portfolio of their scholarly work.

Preparation for the Major. Classics 140 or Humanities 101; Economics 102 or Political Science 103; History 105-106. (12 units)

Foreign Language Requirement. Five semesters or equivalents in a single modern European language (excluding English), to include at least one three-unit upper division course; or four semesters or equivalents in a single modern European language (excluding English), to include at least two three-unit upper division courses. This fulfills foreign language requirement for B.A. degree in Liberal Arts and Sciences.

Upper Division Writing Requirement. Passing the University Writing Examination or History 430W, or English 508W, or Rhetoric and Writing Studies 500W with a grade of C (2.0) or better.

Major. A minimum of 30 upper division units to include Humanities 401, 402, 403, and 404; History 407A-407B; nine units in three disciplines from Economics 330*, Geography 336, History 526, Philosophy 413*, 414*, 506*, Political Science 356, 357, 359, and Women's Studies 340; and a senior thesis under Economics 499, History 499, Humanities 599, or Political Science 499.

* Additional prerequisites required.

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." Each student must file an individual master plan with the humanities undergraduate adviser and with the Office of Admissions and Records.

During their last semester, all seniors majoring in Humanities shall submit to the department a portfolio of their scholarly work.

General Humanities Program

Preparation for the Major. Humanities 101; History 100-101; and three units from Classics 140, Comparative Literature 270A, 270B, English 220, Humanities 140, Philosophy 103, Religious Studies 101, or Women's Studies 102. (12 units)

Foreign Language Requirement. Five semesters or equivalents in a single foreign language, to include at least one three-unit upper division course; or four semesters or equivalents in a single foreign language, to include at least two three-unit upper division courses. This fulfills foreign language requirement for B.A. degree in Liberal Arts and Sciences.

Upper Division Writing Requirement. Passing the University Writing Examination or English 508W or Rhetoric and Writing Studies 500W with a grade of C (2.0) or better.

Major. A minimum of 30 upper division units to include Humanities 460, 490; Asian Studies 458; 12 units from Classics 340, Humanities 401, 402, 403, 404; nine units from Art (art history), Classics, Comparative Literature, English, History, Humanities, Music 351A, 351B, 351C, 351D, 351E, 592, Philosophy, Religious Studies, Theatre 460A, 460B, or Women's Studies, with no more than three units in any discipline (at least three units must be taken in non-Western content; courses in Art, Comparative Literature, English, History, Philosophy, Religious Studies, or Women's Studies may be taken only with prior permission of major adviser).

Emphasis in European Humanities

Preparation for the Major. Humanities 101; History 105-106; and three units from Comparative Literature 270A, 270B, Humanities 140, Philosophy 103, Religious Studies 101, or Women's Studies 205. (12 units)

Foreign Language Requirement. Five semesters or equivalents in a single foreign language, to include at least one three-unit upper division course; or four semesters or equivalents in a single foreign language, to include at least two three-unit upper division courses. This fulfills foreign language requirement for B.A. degree in Liberal Arts and Sciences.

Upper Division Writing Requirement. Passing the University Writing Examination or English 508W or Rhetoric and Writing Studies 500W with a grade of C (2.0) or better.

Major. A minimum of 30 upper division units to include Classics 340, Humanities 401, 402, 403, 404; three units from Geography 336, Political Science 301A, 301B, or 302; nine units from European content courses in Art (art history), Comparative Literature, English, History, Humanities, Music 351A, 351B, 351C, Philosophy, Religious Studies, Theatre 460A, 460B, or Women's Studies 340, with no more than three units in any discipline (courses in Art, Comparative Literature, English, History, Philosophy, or Religious Studies may be taken only with prior permission of major adviser); and Humanities 490. (Some upper division courses in the major may have prerequisites not included among courses in the preparation for the major.)

European Studies Minor

The minor in European studies consists of a minimum of 18 units to include 6 to 12 units selected from Humanities 401, 402, 403, 404; and 6 to 12 units selected from Geography 336, History 407A, 407B, Political Science 356, and Women's Studies 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.

Humanities Minor

The minor in humanities consists of a minimum of 15 units, of which at least 12 units must be upper division, at least 12 units must be in Humanities, and three to six units in Humanities 460 and Asian Studies 458. Up to six units may be selected from Asian Studies 458, Classics 140 or Comparative Literature 270A.

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

LOWER DIVISION COURSES

101. Introduction to Humanities (3)

Preliminary investigation: How values and ideals are expressed in literary, artistic, and intellectual achievements of individuals and civilizations throughout the world.

130. The Jewish Heritage (3)

Hebraic and Jewish influences on the arts, literature, philosophy, and religion of Western civilization.

140. Mythology (3)

Comparative themes and figures from various mythologies of the world. Interpretation of myths; their influence on art, culture, and history.

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)

310. French Civilization (3)

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

French civilization from Middle Ages to present. Artistic, intellectual achievements and cultural movements.

320. German Civilization (3)

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

German civilization of medieval, Renaissance-Reformation, and modern periods. Artistic, intellectual achievements and cultural movements.

330. Russian Civilization (3) I

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

Russian civilization from Middle Ages to present. Artistic, intellectual achievements and cultural movements.

340. Italian Civilization (3)

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

Italian civilization of medieval, Renaissance, Baroque, and modern periods. Artistic, intellectual achievements and cultural movements.

401. The Medieval Heritage (3) I

Prerequisites: History 105 or 305A, and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

European civilization of the Middle Ages. Artistic and intellectual achievements and cultural movements of the Romanesque and Gothic periods.

402. The Renaissance (3) II

Prerequisites: History 105 or 305A, and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

European civilization of the humanistic Renaissance. Artistic and intellectual achievements and cultural movements from the early Renaissance through the Reformation and Mannerism.

403. The Baroque and the Enlightenment (3) I

Prerequisites: History 106 or 305B, and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

European civilization of the seventeenth and eighteenth centuries. Artistic and intellectual achievements and cultural movements: Baroque and Rococo, Enlightenment and Neoclassicism.

404. The Modern European Heritage (3) II

Prerequisites: History 106 or 305B, and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

Modern European civilization. Artistic and intellectual achievements and cultural movements: Romanticism, Realism, Naturalism, Impressionism, Symbolism, Surrealism, Expressionism, Existentialism.

460. African Civilizations (3)

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

Interdisciplinary survey of sub-Saharan African civilizations, emphasizing religion, literature, and the arts from ancient times to the present.

490. Senior Seminar in Classics and Humanities (3)

Prerequisites: 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.

496. Topics in Humanities (3)

Selected topics in literature and the arts. Comparative themes and critical approaches. May be repeated with new content. 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.

UPPER DIVISION COURSES (Also Acceptable for Advanced Degrees)

596. Topics in Humanities (1-3)

Prerequisite: Upper division standing and consent of instructor.

Special topics on selected aspects of civilization from an interdisciplinary humanities perspective. 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 either the bachelor's or master's degree. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

599. Special Study (1-3)

Prerequisites: Humanities or European studies major or minor with upper division standing, twelve units in courses acceptable for major or minor, and consent of instructor and program chair; or graduate standing and consent of instructor and program chair.

Directed individual study. Maximum credit six units.

Information and Decision Systems

In the College of Business Administration

OFFICE: Student Services 2411

TELEPHONE: (619) 594-5316

FAX: (619) 594-3675

A Member of AACSB—The International Association for Management Education.

Faculty

Emeritus: Archer, Crawford, Feeney, Galbraith, Gibson, Langenbach, Schlessinger, Spaulding, Straub

Chair: Penrose

Professors: Beatty, Chen, Flatley, Hatch, Koster, Lackritz, Norman, Penrose, Raafat, Sherrard, Sondak, Vik

Associate Professors: Addo, Easton, A., Easton, G., Lyons-Lawrence, Yang

Assistant Professor: Wild

Lecturer: Tyler

Offered by the Department

Master of Science degree in business administration.

Master of Business Administration.

Major in information systems with the B.S. degree in business administration.

Major in operations management with the B.S. degree in business administration.

Teaching major in business for the single subject teaching credential.

Minor in information systems.

Minor in operations management.

Admission to the Major

The undergraduate business administration program at San Diego State University is structured such that students desiring a business administration major are first admitted to the prebusiness administration major for their first two years of university work. During these first two years students should complete general education courses and a common core of nine lower division preparation for the business major courses – Accounting 201, Financial Accounting Fundamentals; 202, Managerial Accounting Fundamentals; Finance 140, Business Law; Economics 101, Principles of Economics (Macro); Economics 102, Principles of Economics (Micro); Information and Decision Systems 180, Principles of Information Systems; Information and Decision Systems 290, Business Communication (not required for accounting majors); Mathematics 119, Elementary Statistics for Business; and Mathematics 120, Calculus for Business Analysis. These prerequisite courses may not be taken Cr/NC; the minimum grade in each class is C. All students must have fulfilled the SDSU Mathematics Competency and SDSU Writing Competency requirements and have completed 56 college units.

Supplemental admissions criteria must be met before students may declare an upper division major and be eligible for upper division courses. For current information concerning admissions criteria and procedures, contact the Business Undergraduate Program Office (BA 448).

Business administration majors may not complete a minor in the College of Business Administration.

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 is concerned that each individual upper division student makes reasonable academic progress toward earning a degree. To this end, the College will counsel students who have earned less than a “C” (2.0) average each semester. Further, such students will be warned that continued poor performance may result in their removal from any business major.

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—The International Association for Management Education accredited program. Exceptions require thorough documentation evidencing the above standards.

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.

Operations Management. Operations management majors develop the technical knowledge and skills necessary for professionals in production, production management, and operations management. Most organizations of any significant size have a departmental unit which performs this specialized function. Demand for well-trained production managers has steadily increased due to the need for more technical expertise in our changing sociotechnical world. Production and operations management specialists must have a background in material requirements planning, forecasting, aggregate planning, facility layout, scheduling, inventory control, quality control, and computer operations and capabilities.

Students graduating with a major in operations management would typically find employment in positions such as production manager, production specialist, operations manager, distributions specialist, operations specialist, or other related positions. Work settings include major manufacturing, financial service, and service industries.

Information Systems Major

**With the B.S. Degree in Business Administration
(Major Code: 07021)**

Preparation for the Major. Information and Decision Systems 180, 250, 290; Accountancy 201, 202; Finance 140; Economics 101 and 102; Mathematics 120 or 150; and Economics 201 or Statistics 119. (30-32 units)

These prerequisite courses, except for Information and Decision Systems 250, may not be taken Cr/NC; the minimum grade in each class is C, except for Information and Decision Systems 250. Information and Decision Systems 250 may be taken after the student is admitted to the upper division major. **Additional progress requirements must be met before a student is admitted to an upper division major.**

Upper Division Writing Requirement. Information and Decision Systems 396W with a grade of C (2.0) or better.

Major. Forty-two upper division units consisting of Information and Decision Systems 302, 306, 315, 375, 396W, 406, 480, 492; Finance 323; Management 350 and 405 or Business Administration 404; Marketing 370; six units selected from Information and Decision Systems 301, 407, 408, 460, 475, 482, 483, 515. A "C" (2.0) average is required in the courses stipulated here for the major.

Of the 128 units required for the degree, at least 60 units must be at the upper division level. This includes the 42 units listed above, nine units of upper division General Education, and at least nine units of upper division electives, chosen from within or outside of Business Administration. A minimum of 64 units of coursework applicable to the bachelor's degree must be completed outside the areas of business administration, economics, and statistics. This means that at least nine units of electives (upper or lower division) must be completed in areas other than business administration, economics, and statistics. A maximum of six lower division units of accountancy courses may be used to satisfy degree requirements.

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.

Operations Management Major

**With the B.S. Degree in Business Administration
(Major Code: 05064)**

Preparation for the Major. Information and Decision Systems 180, 290; Accountancy 201, 202; Economics 101, 102; Finance 140; Economics 201 or Statistics 119; Mathematics 120. (27 units)

These prerequisite courses may not be taken Cr/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.**

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. Thirty-nine to 40 upper division units consisting of Information and Decision Systems 302, 460, 461, 462, 464; Finance 323; Management 350; Business Administration 404 or Management 405; Marketing 370; 3-4 units selected from Information and Decision Systems 301, Accountancy 325, Finance 325, 425, Management 352, 458, Marketing 376, 474; and nine additional units selected from upper division Business Administration courses as specified on the master plan. Each student must file an individual master plan with the Operations Management undergraduate adviser by the end of the semester in which the student declares the Operations Management major. A copy of this master plan must be filed with the Office of Admissions and Records when the student applies for graduation. A "C" (2.0) average is required in the courses stipulated here for the major.

Of the 128 units required for the degree, at least 60 units must be at the upper division level. This includes the 39 units listed above, nine units of upper division General Education, and at least 12 units of upper division electives, chosen from within or outside of Business Administration. A minimum of 64 units of coursework applicable to the bachelor's degree must be completed outside the areas of business administration, economics, and statistics. This means that at least nine units of electives (upper or lower division) must be completed in areas other than business administration, economics, and statistics. A maximum of six lower division units of accountancy courses may be used to satisfy degree requirements.

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.

Business Major

**In preparation for the Single Subject Teaching Credential
With the B.S. Degree in Business Administration**

All candidates for the single subject teaching credential in business must complete all requirements for the applicable specialization as outlined in this section of the catalog under Policy Studies or Teacher Education. Students must complete the requirements of a major in one of the five departments within the College of Business Administration. In consultation with the single subject credential adviser in the College of Business Administration, undergraduate students must develop programs which fulfill the State credential requirements. All undergraduate majors must demonstrate office skills proficiency. Finance 589, Personal Financial Planning, is required of all teaching credential majors. Of the 128 units required for the degree, at least 60 units must be at the upper division level.

Student programs must be approved in advance by the College of Business Administration single subject credential adviser.

Information Systems Minor

The minor in information systems consists of a minimum of 21 units to include Information and Decision Systems 180, 250, 306, 315, 375; and six units selected from Information and Decision Systems 406, 407, 408, 480, 482, 483, 492, 515.

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 or in International Business may not complete a minor in the College of Business Administration.

Students must officially declare the minor before taking any upper division business courses. **Students must meet the prerequisites for the minor in effect at the time that they declare the minor.** The current prerequisites for admission to the information systems minor include completion of the following courses with a grade of C or better: Economics 101, 102, and a three unit course in statistics (Statistics 119 is recommended); completion of the General Education requirements in Communication and Critical Thinking; completion of an additional nine units in the department of the student's major, including at least three units of upper division courses. Students must also meet the GPA requirement in effect at the time that they declare the minor. Contact the Business Undergraduate Program Office (BA 448) for admissions criteria and procedures.

Operations Management Minor

The minor in operations management consists of a minimum of 24 units to include Accountancy 201; Economics 101, 102; Information and Decision Systems 302, 460; Management 350; Mathematics 120; and three units selected from Information and Decision Systems 461, 462, 464. Prerequisites to the minor include Economics 201 or Statistics 119.

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 or in International Business may not complete a minor in the College of Business Administration.

Students must officially declare the minor before taking any upper division business courses. **Students must meet the prerequisites for the minor in effect at the time that they declare the minor.** The current prerequisites for admission to the operations management minor include completion of the following courses with a grade of C or better: Economics 101, 102, and a three unit course in statistics (Statistics 119 is recommended); completion of the General Education requirements in Communication and Critical Thinking; completion of an additional nine units in the department of the student's major, including at least three units of upper division courses. Students must also meet the GPA requirement in effect at the time that they declare the minor. Contact the Business Undergraduate Program Office (BA 448) for admissions criteria and procedures.

Courses

LOWER DIVISION COURSES

180. Principles of Information Systems (3) I, II

Applications of computerized systems in business organizations. Basic concepts of computer organization, data processing systems, decision support systems and systems analysis. Solving business problems through use of spreadsheet software.

250. End-User Application Development (3)

Prerequisite: Information and Decision Systems 180.

Application of information systems tools, techniques, and methodologies to support end-users in business organizations. Hands-on introduction to computer programming. Selection, design, and implementation of appropriate information technologies, systems documentation, and training.

290. Business Communication (3) I, II

Prerequisite: Rhetoric and Writing Studies 100 and SDSU Writing Competency requirement.

Effective communication applied to business letters, memos, and long reports. Includes the organization, writing, and presentation of business documents using word processing software. Incorporates basic principles of speaking effectively for business.

UPPER DIVISION COURSES (Intended for Undergraduates)

301. Statistical Analysis for Business (3) I, II

Prerequisites: Mathematics 120; Economics 201 or Statistics 119. 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.

302. Introduction to Production and Operations Management (3) I, II, S

Prerequisites: Mathematics 120; Economics 201 or Statistics 119. 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.

Production and operations management. Master scheduling, material requirements planning, inventory management, capacity planning, production activity control, location analysis, automation, computerized systems, layout planning, linear programming, decision making, queuing, simulation, quality control, project planning.

306. Information Systems Analysis (3) I, II, S

Prerequisites: Information and Decision Systems 250. Approved upper division business major, business minor, or another approved major by the College of Business Administration.

Systems development life cycle concept, with emphasis on analysis of requirements using structured methodology. Feasibility study, needs assessment, prototyping, application design alternatives.

315. Business Application Programming (3)

Prerequisite: Information and Decision Systems 250.

Computer programming for business applications. Appropriate data structures, control structures and program structures. Languages widely used in business applications. Not open to students who have completed a course in COBOL programming

375. Information Systems Technology (3)

Prerequisites: Information and Decision Systems 250. Approved upper division business major, business minor, or another approved major by the College of Business Administration.

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.

390W. Reporting Techniques for Accountants (4)

Prerequisites: Credit or concurrent registration in Accountancy 321; fulfillment of Writing Competency requirement, completion of 60 units, and the General Education requirement in Communication and Critical Thinking. Satisfies University Upper Division Writing requirement as specified in the Graduation Requirements section. **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.

396W. Reporting Techniques for Business Professionals (3) I, II

Prerequisites: Information and Decision Systems 290; fulfillment of Writing Competency requirement, completion of 60 units, and the General Education requirement in Communication and Critical Thinking. Satisfies University Upper Division Writing requirement as specified in the Graduation Requirements section. **Proof of completion of prerequisite 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.

406. Information Systems Design (3) I, II

Prerequisites: Information and Decision Systems 306 and 375, and credit or concurrent registration in Information and Decision Systems 480.

Business information systems design, installation, and implementation as part of the systems development life cycle, with emphasis on structured design methodology.

407. Artificial Intelligence Applications in Business (3)

Prerequisite: Information and Decision Systems 375.

Basic artificial intelligence concepts, knowledge acquisition and representation, automated problem-solving and goal-seeking techniques, applications of artificial intelligence in business, expert systems, differences between data processing and artificial intelligence methodologies.

408. Computer Graphics in Business (3)

Prerequisite: Information and Decision Systems 375.

Application of computer graphics to business, graphics in business reporting, graphics equipment and technology, graphics software, algorithmic manipulation of images, picture processing, principles of graphics interfaces. Case studies.

460. Project Management (3)

Prerequisite: Credit or concurrent registration in Information and Decision Systems 302.

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.

461. Operations Planning Strategy (3)

Prerequisite: Information and Decision Systems 302.

Operations and manufacturing decisions analyzed with respect to process technology, system capacity, location, inventory, and quality assurance. Cases from U.S. and non-U.S. companies used to explore these issues.

462. Logistics and Material Management (3)

Prerequisite: Information and Decision Systems 302.

Tracking material flow from vendor to customer. Supply chain management, forecast error analysis, plant scheduling, control and distribution requirements planning.

464. Quality and Productivity (3)

Prerequisite: Information and Decision Systems 302.

Applications of operations management techniques to improvement of quality and productivity. Total quality control and just-in-time systems. Cases from American and Japanese companies.

475. Advanced Information Systems Technology (3)

Prerequisite: Information and Decision Systems 375.

Relationships between computer hardware, software, and information, including hardware and software functions and organization, systems architecture, foundations of computing, number systems and computer codes, digital logic circuits. Assembly language programming.

480. Data Management Systems (3) I, II

Prerequisite: Information and Decision Systems 375.

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.

482. Information and Decision Systems Practicum (3)

Prerequisite: Completion of at least eighteen units of upper division information and decision systems courses.

Information system design or development project applying knowledge gained in previous coursework done under joint supervision of course instructor and an information systems manager.

483. Networks and Data Communications (3) I, II

Prerequisite: Information and Decision Systems 375.

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.

492. Management of Information Systems (3) I, II

Prerequisite: Information and Decision Systems 306 and 480.

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. Examination of management issue related to systems development and implementation. Management of computer operations and the computer center.

496. Selected Topics in Information Systems (1-4) I, II

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.

498. Investigation and Report (1-3) I, II

Prerequisites: Senior standing and consent of instructor.

May be repeated with new content. Maximum credit six units.

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.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

UPPER DIVISION COURSE (Also Acceptable for Advanced Degrees)

515. Advanced Programming for Business (3) I, II

Prerequisite: Information and Decision Systems 315 or knowledge of one computer programming language.

Advanced programming for business applications in widely used programming languages. Advanced concepts of data structures used in business programming, control structures, and program structures. Selection of programming languages for particular purposes. Not open to students with credit in Information and Decision Systems 383 or 384. (Formerly numbered Information and Decision Systems 415.)

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

Interdisciplinary Programs

Interdisciplinary Programs Offered

Major in interdisciplinary studies in three departments with the B.A. degree in liberal arts and sciences.

Major in Russian and Central European studies with the B.A. degree in liberal arts and sciences.

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 middle east studies.

Certificate in environmental studies.

For information on additional interdisciplinary programs, refer to this section of the catalog under the headings of American Studies, Asian Studies, Child and Family Development, Gerontology, Humanities (European Studies), International Business, International Security and Conflict Resolution, Judaic Studies, Latin American Studies, Liberal Studies, and Social Science.

Interdisciplinary Studies in Three Departments

In the Division of Undergraduate Studies

Office: Administration 201

Telephone: (619) 594-5841

FAX: (619) 594-7934

Faculty

Undergraduate Adviser:

Advising

Preliminary approval of the major must be secured from the Associate Dean of Undergraduate Studies *prior to completion of 90 semester units*. Acceptance into the program requires approval from each of three departmental advisers. Information regarding participating departments and procedures for application is available in the Division of Undergraduate Studies.

The Major

Interdisciplinary Studies in Three Departments is a student-designed major incorporating three different disciplines into a unified theme. The application process includes submission of an essay

justifying a cohesive and rational master plan and the selection of upper and lower division coursework from three participating departments. Guidelines exist for several possible combinations of themes including *Human Services, Performing Arts, and Pre-Health Professions*.

Interdisciplinary Studies in Three Departments

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 49011)

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-201) 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 201 and either Biology 100 or 202 (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 365L, 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.

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

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.

Russian and Central European Studies

In the College of Arts and Letters

Office: Business Administration/Mathematics 304

Telephone: (619) 594-6313

EMAIL: russian.coord@sdsu.edu

Faculty

Undergraduate Adviser: Shapovalov (Russian)

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.

The Major

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.

Russian and Central European Studies Major

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 03071)

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, 200A, 200B. (20 units)

Lower division prerequisites for the upper division courses to be taken in the major. (3-9 units)

Foreign Language Requirement. The foreign language requirement is automatically fulfilled through coursework for preparation for the major.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 33 upper division units to include Economics 330, Geography 337, History 518A-518B, Humanities 330, Political Science 359; nine units of upper division Russian courses; and six units of electives selected with the approval of the adviser.

Urban Studies

In the College of Arts and Letters and the College of Professional Studies and Fine Arts

Office: Professional Studies and Fine Arts 105

Telephone: (619) 594-6224

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, Political Science, Public Administration and Urban Studies, and Sociology.

Chair and Undergraduate Adviser: Caves (Public Administration and Urban Studies)

Committee: Chandler (Sociology), Ford (Geography), Herzog (Chicana and Chicano Studies), Kartman (Economics), Kazimi (Economics), Kennedy (Sociology), Pendleton (Anthropology), Rodriguez (Chicana and Chicano Studies), Schultze (Political Science), Walshok (Public Administration and Urban Studies)

Advising

All urban studies majors must meet at least once each semester with the urban studies program coordinator for advice on meeting general program requirements and for assignment to an urban studies adviser within the department of concentration.

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.

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; Economics 101, 102; Geography 102; Political Science 101 or 102; Sociology 101; and Economics 201 or Political Science 201 or Sociology 201 or Statistics 250. (Students who specialize in economics must take Economics 201 or Statistics 250.) (21 units)

Foreign Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language as part of the preparation for the major. Refer to the section of this catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 30 upper division units to include 12 units selected from the following: Chicana and Chicano Studies 355; Economics 458; Geography 354; Public Administration 310; Sociology 557; and 18 units in an area of specialization (may include up to three units outside the specialization).

Anthropology. Required: Anthropology 580; and 12 units selected from Anthropology 349, 430, 444, 582, 583.

Economics. Required: Economics 341; and 12 units selected from Economics 307, 320, 321, 401, 489, 565.

Geography. Required: Geography 385 or 585; and 12 units selected from Geography 353, 358, 381, 385, 488, 554, 556, 559, 560, 572, 582, 585, 588.

Mexican American Border Studies. Required: Chicana and Chicano Studies 355; and 12 units selected from Chicana and Chicano Studies 301, 303, 306, 375, 596.

Political Science. Required: Political Science 515A; and 12 units selected from Political Science 321, 334, 335, 531, 537.

Public Administration and Urban Studies. Nine units selected from Public Administration 350, 420, 510, 512, 520; and six units selected from one of the following groups: (a) 450, 460, 512, 520; (b) 320, 525.

Sociology. Required: Sociology 406 or 407; and 12 units selected from Sociology 350, 355, 406 or 407 (if not taken as a required course), 443, 455, 456, 457, 505, 527, 537, 543, 555.

selected from Biology 315, 324, 327, 359, Economics 452, 453, 454, Geography 370, 570, 571, 573, 574, 575, 577, History 441, 540, Political Science 334, 335, Sociology 350. Recommended: Geological Sciences 303, Philosophy 332, Physics 301.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Middle East Studies Minor

Dr. David H. Johns, Department of Political Science, is adviser for this minor.

The minor in Middle East studies consists of a minimum of 15 units, 12 of which must be upper division, to include Political Science 363, Religious Studies 340*; and six units from History 473A, 473B and 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.

Interdisciplinary Minors

African Studies Minor

Dr. David H. Johns, Department of Political Science, is adviser for this minor.

The minor in African Studies consists of a minimum of 15 units, 12 of which must be upper division, to include History 475A and 475B, Humanities 460; and six units from the following courses in any two departments: Anthropology 449*; Political Science 364; and Religious Studies 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.

Energy Studies Minor

Dr. Alan R. Sweedler, Department of Physics, and Dr. Philip R. Pryde, Department of Geography, are co-advisers for this minor.

The interdisciplinary minor in energy studies* consists of a minimum of 18 units to include 12 units selected from Economics 452, Mechanical Engineering 352, Geography 571, Physics 301; plus six units selected from Art 247 or 347, Economics 453, Electrical Engineering 380, 580, Mechanical Engineering 582, 586, Geography 370, Geological Sciences 521, Political Science 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.

Environment and Society Minor

Dr. Philip R. Pryde, Department of Geography, is adviser for this minor.

The minor in environment and society* consists of a minimum of 15 units to include nine units selected from Biology 327, Economics 452, 453, Geography 370 or 573, and History 441 or 540; and six units

Interdisciplinary Certificate

Environmental Studies Certificate

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 453, Geography 370, 573, International Security and Conflict Resolution 300, Oceanography 320, Political Science 334; and six units selected from Biology 315, 324, 327, Community Health Education 350, Economics 452, 454, 489, Geography 378, 409, 570, 571, 572, 574, Geological Sciences 301, 303, History 441, 540, International Security and Conflict Resolution 301, Oceanography 541, Philosophy 332, Recreation 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. John R. Weeks, Department of Geography, to develop an approved program of coursework.

International Business

In the College of Arts and Letters and
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the College of Business Administration

OFFICE: Business Administration/Mathematics

TELEPHONE: (619) 594-3008

EMAIL: ib@mail.sdsu.edu FAX: (619) 594-7738

WWW: <http://www-rohan.sdsu.edu/dept/ibalumwb/>

A member of AACSB—The International Association for Management Education.

Faculty

International Business is administered by the International Business Program Committee. The program draws on courses offered by faculty in the following areas: Accountancy, African Studies, Asian Studies, Chinese, Communication, Russian and Central European Studies, European Studies, Finance, French, German, Information and Decision Systems, Italian, Japanese, Latin American Studies, Linguistics, Management, Marketing, Middle East Studies, North America, Portuguese, Rhetoric and Writing Studies, Russian, Spanish.

Chair: Loughrin-Sacco (French)

Senior Academic Coordinator: Claudia Allen

Undergraduate Adviser: Mary Ann Dhuyvetter

Committee: Adler (Economics), Butler (Management), Christensen (Spanish), Davies (History), Gerber (Economics), Hergert (Management), Higurashi (Japanese), Padmanabhan (Finance), Rhyne (Management), Saghafi (Marketing), Salehizadeh (Finance), Schorr (French), Wilbur (Finance)

Offered by International Business

Major in international business with the B.A. degree in liberal arts and sciences.

Emphases in language: Chinese, English, French, German, Italian, Japanese, Portuguese, Russian, Spanish.

Emphases in regional/cultural studies: Africa, Asia, Latin America, Middle East, North America, Russia and Central Europe, Western Europe.

The Major

International business is an interdisciplinary major which culminates in a Bachelor of Arts degree offered jointly by the College of Arts and Letters and the College of Business Administration, a member of the American Assembly of Collegiate Schools of Business. This program integrates coursework in business administration, foreign language, and regional/cultural studies. It offers students an opportunity to combine two emphases, one in a language and one in regional/cultural studies, and to create a focused program of study, suited to their individual interests and career goals.

Students select one of nine emphases in foreign language (chosen from Chinese, English, French, German, Italian, Japanese, Portuguese, Russian, Spanish) and one of seven emphases in regional/cultural studies (chosen from Africa, Asia, Latin America, Middle East, North America, Russia and Central Europe, and Western Europe). Students also complete the necessary business courses to meet accreditation standards of the American Assembly of Collegiate Schools of Business (AACSB) for a major in business administration.

The international business program is one of the many activities sponsored by the SDSU Center for International Business Education and Research (CIBER). This Center is partially funded by the U.S. Department of Education and administered by SDSU's Colleges of Arts and Letters and Business Administration in order to promote international business education in the region.

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.

MEXUS

MEXUS is a transnational dual degree program conducted in partnership with Southwestern College (SWC) in Chula Vista, California and the Centro de Enseñanza Técnica y Superior (CETYS), and the Universidad Autónoma de Baja California (UABC) in Tijuana, Mexico. Students may enter the program at any of the four schools and must spend a minimum of two years of study each in the U.S. and Mexico.

Participants in the MEXUS program are enrolled in the International Business major at San Diego State University.

In addition to completing 49 units of General Education requirements at SDSU, students in the MEXUS program must complete 101 units of International Business courses. Approximately one-half of all of these requirements are completed in Spanish while attending school in Mexico. Successful participants earn both the Bachelor of Arts degree in Liberal Arts and Sciences with a major in International Business, Emphases in Spanish and Latin America from SDSU, and the Licenciatura en Negocios Internacionales from either UABC or CETYS.

Project North America

Project North America is a trinational consortium designed to increase the educational opportunities for university students to study abroad and participate as interns in the United States, Canada, and Mexico. Students are immersed in the culture and language of each of the NAFTA partners.

Project North America is a consortium of six universities, two each from the United States, Canada, and Mexico. In the United States participating universities are San Diego State University and the University of North Carolina. In Mexico are Centro de Enseñanza Técnica y Superior (CETYS) and Universidad de Guadalajara. In Canada are Bishop's University and Simon Fraser University. Students spend one semester in Canada and one in Mexico and take regular academic courses which focus on the means of transacting business in the host countries. The training and exchange curriculum is integrated into the student's academic plan. Credit is received for all foreign coursework and normal progress toward the degree is maintained.

Study Abroad Programs

The International business program currently has direct exchange agreements with: Bishop's University, Québec, Canada; Simon Fraser University, Vancouver, B.C., Canada; Ecole Supérieure des Practiciens de Commerce International (Groupe ESSEC), Cergy Pontoise, France; Fachhochschule Reutlingen, Reutlingen, Germany; Centro de Enseñanza Técnica y Superior (CETYS), Mexicali and Tijuana, Mexico; Universidad Autónoma de Baja California (UABC), Tijuana, Mexico; Universidad de Guadalajara, Guadalajara, Mexico; and Universidad de Valladolid, Valladolid, Spain. These programs provide qualified International Business majors the opportunity for study abroad and make normal progress toward the degree while paying SDSU fees only.

Internships

International Business majors complete internships in “international” firms and organizations in the U.S. and abroad by enrolling in IB 495: International Business Internship.

Honors Courses

Honors courses in business which are independent of the University Honors Program are scheduled regularly. Students should consult the Class Schedule and contact the International Business Program office for information about participation in this program.

Impacted Program

The International Business major is designated as an impacted program and specific regulations related to admissions are imposed. Before enrolling in any upper division courses in business administration, students must be admitted into the International Business major code (05131). In order to be admitted, students must have satisfied the following supplementary admissions criteria:

- Have completed all Preparation for the Major courses in Business with a grade of C (2.0) or better in any course taken beginning Fall 1992;
- Have completed all Preparation for the Major courses in the Language Emphasis;
- Have completed a minimum of 56 units, and
- Have compiled a grade point average of 2.75 based on all courses attempted at SDSU and transferable courses at other universities, liberal arts colleges, and community colleges.
- Have passed the SDSU mathematics and writing competency examinations.

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 undergraduate adviser during their first semester on campus.

International Business Major

With the B.A. Degree in Liberal Arts and Sciences
(Premajor Code: 80000U) (Major Code: 05131)

Applications from new students will be accepted only during the months of August for the following spring semester and November for the following fall semester. Change of major and declaration of major will be accepted from continuing students only during August for the spring semester and January for the fall semester.

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. International Business majors may not complete a minor in the College of Business Administration or in the language or regional/cultural study used to satisfy major requirements.

Preparation for the major courses in business and language may not be taken for Cr/NC; **the minimum grade in each course in business is C.**

Preparation for the Major. (Complete I, II, and III: 38-51 units)

- I. Business** (All preparation for the major in the business and language portions of this major must be completed before enrolling in any upper division courses in Business Administration):

Accountancy 201, 202; Economics 101, 102; Economics 201 or Statistics 119; Finance 140; and Information and Decision Systems 180. (21 units)

- II. Language Emphasis** (choose one language): Students who have graduated from secondary school in these languages must complete coursework to meet higher language level criteria in the International Business major. Contact International Business for details.

†Chinese 101, 102, 201, 202. (20 units)

English (**Not open to native speakers of English nor to students who graduated from secondary school where English was the principal language of instruction nor to students with native-like fluency in English.**) Communication 103 and 204; Information and Decision Systems 290; Rhetoric and Writing Studies 100 or Linguistics 100; Rhetoric and Writing Studies 200 or Linguistics 200. (15 units)

French 100A, 100B, 201, 210, 220, 221. (22 units)

German 100A, 100B, 200, 201, 202, 210. (22 units)

Italian 100A, 100B, 200A, 200B. (16 units)

†Japanese 111, 112, 211, 212. (24 units)

Portuguese 101, 201. (10 units)

§Russian 100A, 100B, 200A, 200B, 211. (23 units)

Spanish 101, 102, 103, 202, 211, 212. Spanish 281 replaces 103 and 211; Spanish 282 replaces 202 and 212; and Spanish 381 replaces 301 and 302 for U.S. Hispanics. See adviser in Spanish Department. (22 units)

† Students choosing Chinese or Japanese language emphasis must complete the Asia regional/cultural emphasis.

§ Students choosing Russian language emphasis must complete the Russia and Central Europe regional/cultural emphasis.

- III. Regional/Cultural Studies Emphasis** (choose one region):

Africa: History 100 and 101.

Asia: Asian Studies 106, 107.

Latin America: Six units selected from History 115A, 115B (recommended); Latin American Studies 101 (recommended).

Middle East: History 100 and 101.

North America: Six units selected from History 110A-110B or 115A-115B or Political Science 101, 102.

Russia and Central Europe: Six units selected from Classics 140; History 105, 106 (recommended).

Western Europe: Six units selected from Classics 140; History 105, 106 (recommended).

Language Requirement. The language requirement is automatically fulfilled through coursework for preparation for the major.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. (Complete I, II, and III below: 53-57 units) **A minimum grade point average of 2.0 is required for graduation in each of the three areas.**

- 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):

Specialization: A minimum of 28 upper division units to include Finance 323, 329; Information and Decision Systems 302; Management 350, 405; Marketing 370, 376, and completion of one of the following areas of specialization:

Finance: Two 300 or 400-level courses in finance.

Management: Management 357 and one 300 or 400-level course in management.

Marketing: Two marketing courses at the 300-level or above.

II. Language Emphasis (choose one language): Students who have graduated from secondary school in these languages must complete coursework to meet higher language level criteria in the International Business major. Contact International Business for details.

Language Proficiency Assessment Requirement. Students are required to satisfy the Language Proficiency Assessment Requirement during or immediately following the semester in which they complete the last course in the Language Emphasis in the major. Each student will receive an ACTFL (American Council on the Teaching of Foreign Language) proficiency rating in language of student's emphasis. For further information concerning test dates and fees, contact the International Business office.

Chinese 301, 302, 431, 434. (12 units)

English (Not open to native speakers of English nor to students with native-like fluency in English.) Communication 307, 371; Linguistics 305W or Rhetoric and Writing Studies 305W or 500W; Information and Decision Systems 396W or Rhetoric and Writing Studies 503W. (12 units)

French 301, 302, 422, and 423. (12 units)

German 301, 303, 310 or 501, 420. (12 units)

Italian 301; 305A, 305B, 421. (12 units)

Japanese 311, 312, 321 or 322, 411. (16 units)

Portuguese 301, 401, 443, 534 (for Western Europe Regional/Cultural Emphasis) or 535 (for Latin America Regional/Cultural Emphasis). (12 units)

Russian 301, 303; and two courses selected from 304, 501, 580. (12 units)

Spanish 301, 302, 307, 497. (12 units)

III. Regional/Cultural Studies Emphasis (Choose one region. Maximum five courses may be applied to the major.)

Africa: International Business 495, 498, and a minimum of nine units, with no more than six units from one department selected from Africana Studies 463, 470; Anthropology 449; Comparative Literature 440; Economics 336, French 425; History 475A-475B; Humanities 460; Political Science 364; Religious Studies 340; Women's Studies 580*.

Asia: International Business 495, 498, and a minimum of nine units, with no more than two courses from one department selected from Anthropology 450, 452, 453, 582*; Asian Studies 458*, 459*, 560 596; Chinese 351[®], 352, 431, 433[®], 450[®], 451[®]; Comparative Literature 455, 460, 530; Economics 330, 336, 360, 365, 465; History 420, 421, 480, 561, 564A, 564B, 565, 566, 567, 569, 570; Japanese 321, 322, 412[#], 421, 422, 496*; Philosophy 351, 575*; Political Science 362, 393, 562*, 575*; Religious Studies 401*, 403*.

Latin America: International Business 495, 498, and a minimum of nine units, with no more than six units from one department, selected from Anthropology 442, 582*; Art 561, 562; Chicana and Chicano Studies 306, 310, 350A, 355, 375, 376, 400; Comparative Literature 445; Economics 336*, 360 (recommended), 365, 464, 565; Geography 323, 324, 353*; History 415A, 415B, 480, 551A, 551B, 552, 554, 555, 556, 557, 558, 559*; Latin American Studies 498, 530, 531, 560, 570, 575, 580; Political Science 393, 481*, 566, 567, 568, 575*; Portuguese 535; Public Administration 580**; Sociology 556**; Spanish 341, 342, 406A, 406B, 491*, 492*, 493*; Women's Studies 310*, 580*.

Middle East: International Business 495, 498, and a minimum of nine units, with no more than six units from one department, selected from Art 596; History 473A-473B, 488, 574; Political Science 363; Religious Studies 340; Women's Studies 580*.

North America: International Business 495, 498, Economics 565, and a minimum of six units, one course (three units) each from section A. *Mexico and Mexico-U.S. Border* and section B. *United*

States.

A. *Mexico and Mexico-U.S. Border:* Chicana and Chicano Studies 306, 340, 350A, 355, 375, 498*; History 551A-551B; Political Science 568; Spanish 342, 515*.

B. *United States:* Africana Studies 320, 321, 322, 471B; American Indian Studies 320, 400, 440; American Studies 580; Anthropology 444, 445, 446; Chicana and Chicano Studies 301, 303, 310, 320, 335, 350B, 376, 380, 480; Communication 371; Economics 330, 338; English 494, 519, 525; Geography 321, 353*, 354, 358; History 310A, 310B, 430W, 442A, 442B, 536, 537A, 537B, 540, 541A, 541B, 544A, 544B, 545A, 545B, 546A, 546B, 547A, 547B, 548A, 548B; Latin American Studies 575; Linguistics 524; Political Science 305, 320, 321, 338, 347A, 347B, 348, 422, 436, 530, 531; Religious Studies 390; Sociology 320, 335, 355, 421, 430, 433, 531, 532, 537; Women's Studies 341A, 341B, 375.

Russia and Central Europe: International Business 495, 498, and a minimum of nine units with three units selected from the following courses taught in English: Economics 330; Geography 337; History 518A, 518B; Humanities 330; Political Science 393*; Russian 305A, 305B; and six units selected from the following courses taught in Russian: Russian 304%, 430, 501%, 555, 563, 580%. Students who select the Russia and Central Europe Emphasis whose *language* emphasis is *other than* Russian: International Business 495, 498, and a minimum of nine units selected from Economics 330, Geography 337, History 518A, 518B, Humanities 330, Political Science 393, and Russian 305A, 305B.

Western Europe: International Business 495, 498, and a minimum of nine units, with no more than six units from one department, selected from Anthropology 582*; Comparative Literature 511, 512, 513, 514; Economics 330, 360; French 305A, 305B, 421, 424, 425; Geography 336, 353*; German 310, 320, 520*, 530*; History 407A, 407B, 480, 511A, 511B, 512A, 512B, 513B, 514*, 517A, 517B, 518A, 518B, 519, 522A, 522B, 526, 527, 528, 558; Humanities 310, 320, 330, 340, 401, 402, 403, 404; Italian 305A, 305B; Philosophy 411, 412, 413, 414; Political Science 356, 393*; Portuguese 534; Spanish 340, 405A, 405B, 491*, 492, 493*; Women's Studies 340.

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.

* Indicates courses with prerequisites not included in requirements listed above.

+ These courses may be included in the major only with the written approval of the undergraduate adviser for international business.

% Indicates courses that may be used to satisfy the major requirement in regional/cultural studies emphasis when not used to satisfy the language emphasis.

® Two of these courses are required of students choosing Chinese to satisfy the language emphasis of the major.

Required of students choosing Japanese to satisfy the language emphasis.

Certificat pratique de français commercial et économique

The Center for International Business Education and Research (CIBER) administers the *Chambre de Commerce et d'Industrie de Paris Certificat pratique de français commercial et économique* examination each semester at SDSU. Students who satisfy the French language requirement in International Business (31 units): French 100A, 100B, 201, 210, 220, 221, 301, 422, and 423 (with a minimum grade of B) or equivalent are eligible to sit for this examination.

Certificado de Español Comercial

The Center for International Business Education and Research (CIBER) administers the Cámara de Comercio e Industria de Madrid *Certificado de Español Comercial* examination each semester at SDSU. Students who satisfy the Spanish language requirement in International Business (31 units): Spanish 101, 102, 103, 202, 211, 212, 301, 307, and 497 (with a minimum grade of B) or equivalent are eligible to sit for this examination.

Courses

LOWER DIVISION COURSES

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.

299. Special Study (3-6)

Prerequisite: Pre-international business major.
Individual study. Maximum credit six units.

UPPER DIVISION COURSES (Intended for Undergraduates)

495. International Business Internship (3) I, II Cr/NC

Prerequisites: Consent of instructor; upper division standing in the major.

Internships with international business firms, in U.S. and abroad, nonprofit organizations, and government agencies. Work done under joint direction of activity sponsor and instructor. Project report and internship conferences required. Maximum credit three units.

498. Doing Business Internationally (1) Cr/NC

Prerequisites: Upper division status in the major and one 300-level foreign language course in the language of the student's emphasis.

Business customs and protocol pertinent to a foreign language and the regions in which that language is spoken. Taught in Chinese, French, German, Italian, Japanese, Portuguese, Russian, and Spanish. Course is waived for students completing an approved study program or internship abroad and for students completing the language emphasis in English. International Business 498 may be repeated with different language emphasis.

499. Special Study (1-6)

Prerequisite: International business major.
Individual study. Maximum credit six units.

UPPER DIVISION COURSE (Also Acceptable for Advanced Degrees)

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.

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: Nasatir Hall 121
TELEPHONE: (619) 594-2778
FAX: (619) 594-7302

The international security and conflict resolution major is overseen by the Institute for International Security and Conflict Resolution (IISCOR) and administered by the International Security and Conflict Resolution (ISCOR) program committee. The major includes courses offered by faculty in the Colleges of Arts and Letters; Health and Human Services; Professional Studies and Fine Arts; and Sciences.

International security and conflict resolution are seen as involving more than international relations and the more traditional focus on military power and the threat or use of force. They extend into such areas as arms control, economic development, human rights and resources and the environment.

Faculty

ISCOR Program Director and Undergraduate Adviser: Johns (Political Science)

ISCOR Curriculum Committee: Cottrell (Sociology), Gupta (Public Administration and Urban Studies), Johns (Political Science), Sabbadini (Biology), Sweedler (Physics)

Offered by International Security and Conflict Resolution

Major in international security and conflict resolution with the B.A. degree in liberal arts and sciences.

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 focusing on the impact of resolution of various world and regional disputes. 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 requires and integrates coursework from natural sciences, social and behavioral sciences, and humanities.

In order to provide both breadth and depth for the courses of study, all students are required to complete a set of courses addressing the major themes of the development of global systems and the nature of conflict and conflict resolution. All students must select an integrated set of courses from different disciplines focused on an area of specialization related to international security and conflict resolution in global systems, in cooperation, conflict and conflict resolution, or in environment and security.

Those completing the major will be prepared for careers in business, government, international relations or nonprofit organizations at the local, state, national or international level as they relate to international security and conflict resolution. Alternatively, majors will be prepared to pursue graduate or professional studies in a particular discipline or area related to international security and conflict resolution.

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 on campus.

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."

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 or to include a period of study abroad. 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 either a minor, even a second minor, if a minor in a foreign language is taken, in an area studies programs, e.g., African Studies, Asian Studies, European Studies, Latin American Studies, or Middle East 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, perhaps tied in with a specific foreign language.

Majors should also seriously consider overseas study, whether for an academic year, a semester or during the intersession or the summer. The CSU International Programs offers a wide selection of study locales and learning environments. In addition, SDSU has bilateral agreements with more than one hundred universities throughout the world which may provide for student exchange and overseas study. Courses taken under the auspices of these and other programs may be accepted as part of the ISCOR program. Students should consult with the Undergraduate Adviser before enrolling in overseas study in order to clarify transferability and comparability of courses.

Preparation for the Major. (24 units) Economics 101, 102; History 101; Political Science 103; Religious Studies 101; and three units from each of the following groups:

- Anthropology 102 or Geography 102;
- Comparative Literature 270B, History 100, or Philosophy 101;
- Economics 201, Political Science 201, Psychology 270 or Sociology 201, Statistics 119 or 250.

Recommended for General Education in the Natural Sciences: In the Life Sciences, Biology 100 or 101; in the Physical Sciences, Chemistry 100, Geography 101 or Physics 107.

Foreign Language Requirement. 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. A minimum 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units to include 18 units in International Security and Conflict Resolution 300, 301, 310, 320 and either 495 or 497; Political Science 375; and 18 units from one of the three specializations: Global Systems; Cooperation, Conflict, and Conflict Resolution; or Environment and Security.

Specialization in Global Systems

This specialization focuses on the political, economic, and social characteristics of global systems, which include the study of international relations, comparative regional studies, and internationally mobile populations. An understanding of global systems will provide the context for analyzing issues of international security, cooperation and conflict.

Requirements for specialization. A minimum of 18 units to include Economics 360; six units selected from Economics 330; History 480; Political Science 577; six additional units from courses listed above or from Aerospace Studies 400B; Anthropology 350 **; Asian Studies 560***; Chicana and Chicano Studies 306 or Sociology 555***; Economics 336 or 365; Geography 312*, 554*; History 407B or 486 or 511B or 512A or 512B; History 543** or 544B; Political Science 361 or 478 or 479 or 481** or 555 or 560; Sociology 350**; Women's Studies 580*; and three units from Asian Studies 459; Chicana and Chicano Studies 355; History 421, 473B, 475B, 555, 564B, 565; Political Science 363, 364, 566.

Specialization in Cooperation, Conflict, and Conflict Resolution

This specialization is concerned with exploring the causes, nature, consequences, management, and resolution of conflict at the societal level. 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 and ethnic hostility as they impact international security.

Requirements for specialization. A minimum of 18 units to include nine units selected from Africana Studies 445+ or Psychology 340** or Sociology 410**; Biology 339**; Communication 371**; Philosophy 512**; Political Science 302, 370; Political Science 531** or Sociology 457** or Women's Studies 530*; Religious Studies 354 or Sociology 338**; Social Work 350; Sociology 433**, 537**; and nine units selected from the following courses including at least three units selected from Africana Studies 321+, 448; American Indian Studies 400; Geography 337; History 486, 511B, 512A, 514+, 533B, 556, 574; Political Science 363, 364, 566; Sociology 355**; Women's Studies 375, 536**; and at least three units selected from Africana Studies 325, 452*; Communication 408; Philosophy 329; Political Science 479; Public Administration 530*.

Specialization in Environment and Security

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 18 units to include nine units selected from Biology 315**; Community Health Education 362; Economics 452; Geography 370*; Physics 301; Political Science 334; Sociology 350**; and nine units selected from the courses listed above or from Biology 324*, 339**, 354*, 359**; Community Health Education 350; Economics 453, 489; Geography 378*, 570*, 571*, 574*; History 441; Natural Science 333; Philosophy 329, 332, 333.

- + 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).
- +++ Consent of instructor required.

Courses

**UPPER DIVISION COURSES
(Intended for Undergraduates)**

300. Global Systems (3) I

Prerequisite: Nine units of General Education requirements in Foundations, 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.

301. Conflict and Conflict Resolution (3) II

Prerequisite: Nine units of General Education requirements in Foundations, 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.

310. Our Global Future: Values for Survival (3) I

Prerequisite: Completion of the General Education requirement in Foundations 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; team taught.

320. International Security in the Nuclear Age (3) II

Prerequisites: Upper division standing. Nine units of General Education requirements in Foundations, 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.

495. Internship in International Security and Conflict Resolution (3) I, II

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.

496. Selected Topics in International Security and Conflict Resolution (1-3)

Selected topics in international security and conflict resolution. See Class Schedule for specific content. May be repeated with new content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

497. Thesis in International Security and Conflict Resolution (3) I, II

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.

499. Special Study (1-3) I, II

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 College of Arts and Letters

OFFICE: Business Administration 304

TELEPHONE: (619) 594-6491

FAX: (619) 594-6006

EMAIL: italian.coord@sdsu.edu

Faculty

Emeritus: Vergani, G., Vergani, L.

Chair:

Lecturer: Guidotti

Offered by the Department of French and Italian Languages and Literatures

Major in international business, with emphasis in Italian. See International Business.

Minor in Italian.

Italian Minor

The minor in Italian consists of a minimum of 15 units in Italian, nine units of which must be in upper division courses in the language, with a minimum of six upper division units completed in residence at San Diego State University.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable.

Students 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 two upper division Italian courses.

Foreign Language Requirement for the B.A. Degree in Liberal Arts and Sciences

Students electing the study of Italian to fulfill the foreign language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Italian 201 or 210 or the equivalent level of achievement. The usual sequence of coursework is Italian 100A, 100B, and 201 or 210. 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 foreign 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, although students with fewer than three years of high school level language may complete the first semester college course for graduation credit.

2. The first three years of high school level language count as the equivalent of the first two college semesters, although students with fewer than four years of high school level language may complete the second semester college course for graduation credit. Students who have completed three years of foreign language in high school will not receive credit for the first semester college course unless at least five years separate the last high school course and the first college course.

3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the foreign language requirement.

Courses

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, 201/210, or 301 are taken concurrently or out of sequence. However, Italian 201 and 210 may be taken in any order or concurrently.

100A. Elementary Italian I (5) I, II

Pronunciation, speaking and writing, readings on Italian culture and civilization, essentials of grammar. Not open to students who have completed three years of high school Italian unless the third course was completed five or more years ago.

100B. Elementary Italian II (5) I, II

Prerequisite: Italian 100A or two years of high school Italian.

Continuation of Italian 100A. Not open to students who have completed four years of high school Italian unless the fourth course was completed five or more years ago.

201. Reading and Speaking Italian (3) I

Prerequisite: Italian 100B or three years of high school Italian. Italian minors and international businessmajors are encouraged to enroll concurrently in Italian 210 when available. Recommended for students wanting to satisfy the Foreign Language Graduation Requirement (FLGR).

Emphasis on spoken language with readings of cultural material serving as a basis for discussion. (Formerly numbered Italian 2008.)

210. Intermediate Grammar and Composition (3) II

Prerequisites: Italian 100B or three years of high school Italian. Italian minors and international business majors are encouraged to enroll concurrently in Italian 201 when available.

Comprehensive survey of Italian grammar at intermediate level. Study of a variety of prose models and practice in writing. (Formerly numbered Italian 200A.)

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. Taught in Italian. 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 Italian courses are taught in Italian unless otherwise noted.

Italian 301 is not open to students who hold the Italian secondary school diploma.

301. Advanced Oral and Written Composition (3)

Prerequisites: Six units of 200-level Italian, and completion of the General Education requirement in Foundations II.C., Humanities.

Grammar review. Reading of modern Italian prose, with written reports and oral discussions in Italian.

305A. Italian Literature (3)

Prerequisites: Six units of 200-level Italian, and completion of the General Education requirement in Foundations KC., Humanities.

Important movements, authors and works in Italian literature from Middle Ages to the Renaissance.

305B. Italian Literature (3)

Prerequisites: Six units of 200-level Italian.
Continuation of Italian 305A from the Renaissance to the present.

421. Italian Civilization (3)

Prerequisites: Six units of 200-level Italian, and completion of the General Education requirement in Foundations II.C., Humanities
Major aspects of Italian civilization with emphasis on art, music, history, and cinema.

496. Selected Topics (1-4)

Topics in Italian language, literature, culture and linguistics, Conducted in English or in Italian. 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.

499. Special Study (1-3) I, II

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.

Japanese

In the College of Arts and Letters

OFFICE: Business Administration 327
TELEPHONE: (619) 594-5268
FAX: (619) 594-4877

Faculty

Chair: Choi
Professor: Higurashi
Assistant Professor: Kitajima
Lecturer: Miyamoto

Offered by the Department of Linguistics and Oriental Languages

Major in Japanese.
Major in international business, with emphasis in Japanese. **See** International Business.
Minor in Japanese.

The Major

Japanese is the fastest growing language in U.S. higher education. Due to the interdependence between the U.S. and Japan, as well as Japan's role in the world economy, the importance of Japanese has become evident.

Students who major in Japanese will gain proficiency in Japanese 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 Japanese is also a good preparatory curriculum for graduate programs in such areas as international business, international law, librarianship, public administration, and journalism.

A knowledge of Japanese 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 internationally oriented companies, government agencies, the press corps, and the tourism industry. It also gives graduates an advantage in looking for positions in Japan in such areas as language teaching, business consulting, or 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 are declaration or change of major.

Japanese Major

**With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 11081)**

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 Japanese must complete a minor in another field to be approved by the departmental adviser in Japanese.

All students with transfer credits must take placement test at the Test 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 equivalent, will receive no credit for Japanese 311, 312, 321, 322, 411, 412, 421, and 422.

Preparation for the Major. Japanese 111, 112, 211, and 212. (24 units) A maximum of 24 lower division units of Japanese courses may be used to satisfy degree requirements.

Foreign Language Requirement. The foreign language requirement is automatically fulfilled through coursework for preparation for the major.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 32 upper division units in Japanese to include Japanese 311, 312, 321, 322, 411, 412, 421, and 422.

Japanese Minor

The minor in Japanese consists of a minimum of 24 units in Japanese, at least 12 units of which must be in upper division 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 eight upper division units must be completed in residence at San Diego State University, and a proficiency level equal to that of Japanese 411 must be demonstrated.

Foreign Language Requirement for the B.A. Degree in Liberal Arts and Sciences

Students electing the study of Japanese to fulfill the foreign 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 foreign 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, although students with fewer than three years of high school level language may complete the first semester college course for graduation credit.

2. The first *three years* of high school level language count as the equivalent of the first two college semesters, although students with fewer than four years of high school level language may complete the second semester college course for graduation credit. Students who have completed three years of foreign language in high school will not receive credit for the first semester college course unless at least five years separate the last high school course and the first college course.

3. Four years of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the foreign language requirement.

Courses

LOWER DIVISION COURSES

Native speakers of Japanese will not receive credit for taking lower division courses except with advance approval from the department.

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.

111. Elementary Japanese I (6) I

Six 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. Not open to students who have completed three years of high school Japanese unless the third course was completed five or more years ago. (Formerly numbered Japanese 101.)

112. Elementary Japanese II (6) II

Six lectures and one hour of laboratory.

Prerequisite: Japanese 111.

Continuation of Japanese 111. Preparation for Japanese 211. Not open to students who have completed four years of high school Japanese unless the fourth course was completed five or more years ago. (Formerly numbered Japanese 102 and 202.)

211. Intermediate Japanese I (6) I

Six 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.)

212. Intermediate Japanese II (6) II

Six 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.

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 Japanese are taught in Japanese unless otherwise stated.

No credit will be given for Japanese 311, 312, 411, 412 taken out of sequence.

311. Third Year Japanese I (4) I

Four Lectures and one hour of laboratory.

Prerequisites: Japanese 212 and completion of the General Education requirement in Foundations II.C., Humanities.

Continuation of Japanese 212. Strengthening of communication skills in Japanese; various literary styles; all kyoiku kanji. Cultural values shaping modern Japanese society; intercultural communication. Preparation for Japanese 312.

312. Third Year Japanese II (4) II

Four lectures and one hour of laboratory.

Prerequisites: Japanese 311 and completion of the General Education requirement in Foundations II.C., Humanities.

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.

321. Advanced Japanese Discourse (4)

Prerequisite: Japanese 212.

Varieties of Japanese such as broadcasting Japanese, lectures, business negotiations, and ceremonial discourses. Focus on listening comprehension.

322. Advanced Conversation Through Media (4)

Prerequisite: Japanese 311.

Development of advanced conversation skills through understanding and analysis of social and linguistic aspects of modern Japanese drama. Role play, practical vocabulary, and useful expressions; conversation on assigned topics.

411. Fourth Year Japanese I (4)

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.

412. Fourth Year Japanese II (4)

Prerequisite: Japanese 411.

Continuation of Japanese 411. Further strengthening of communication skills in Japanese; various literary styles; all 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.

421. Japanese Literature Through Text and Film (4)

Prerequisite: Japanese 312.

Japanese literature from earliest times to present. Major works of modern Japanese fiction as a literary genre and their cinematic inter-pretation.

422. Newspaper Reading and Advanced Composition (4)

Prerequisite: Japanese 411.

Advanced readings in general and specialized texts selected from current newspapers and magazines published in Japan. Discussion of text and development of related compositions.

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.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

Journalism

Refer to "Communication" in this section of the catalog.

Judaic Studies

In the College of Arts and Letters

OFFICE: Adams Humanities 4188
TELEPHONE: (619) 594-5338

Faculty

Faculty assigned to teach courses in Judaic studies are drawn from departments in the College of Arts and Letters.

Chair: Baron (History)

Committee: Bar-Lev (Linguistics), Borkat (English), Cayleff (Women's Studies), Chandler (Sociology), DuFault (History), Esser (Art), Grossbard-Shechtman (Economics), Kohn (Religious Studies), Koster (Information and Decision Systems), O'Brien (History), Shapovalov (Russian), Sheres (English and Comparative Literature), Sparks (Religious Studies), Strom (Teacher Education), Wood (Sociology)

Offered by Judaic Studies

Minor in Judaic studies.

The Minor

The minor in Judaic studies 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 Judaic studies may want to consider combining it with a major in Social Science with an emphasis on Africa and the Middle East. Many courses relevant to this major are available in anthropology, economics, geography, history, political science, and sociology.

Judaic Studies Minor

Dr. Lawrence Baron, Department of History, is adviser for this minor.

The minor in Judaic studies consists of a minimum of 19-20 units to include seven to eight units selected from Humanities 130 and Hebrew 101, 102, or 201; and 12 upper division units selected from Comparative Literature 405; History 440, 488, 574; Religious Studies 301, 320, 330. Judaic Studies 496; Hebrew 496; and other relevant courses may be counted as part of the 12 upper division units taken with the approval of the adviser for Judaic Studies.

“If you think education is
expensive, try ignorance.”

—Derek Bok

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

LOWER DIVISION COURSES

100. New Perspectives in Judaic Studies (1) Cr/NC I, II

New interpretations of Jewish history, culture, and social issues. Presentations from perspective of various disciplines. Contemporary issues.

296. Topics in Judaic 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 COURSE (Intended for Undergraduates)

496. Topics in Judaic Studies (1-3)

Prerequisite: Upper division status.

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

Latin

Refer to “Classics” in this section of the catalog.

Latin American Studies

In the College of Arts and Letters

OFFICE: Storm Hall 146
TELEPHONE: (619) 594-1103

Faculty

Latin American studies is administered by the Latin American Studies Committee. Faculty assigned to teach courses in Latin American studies are drawn from the Departments of Anthropology, Art, Chicana and Chicano Studies, Communication, Comparative Literature, Economics, Geography, History, Political Science, Public Administration and Urban Studies, Sociology, Spanish and Portuguese Languages and Literatures, and Women's Studies; and the College of Business Administration.

Chair and Undergraduate Adviser: Davies (History)

Committee: Ball (Anthropology), Barrera (Spanish), Borrás (Spanish), Carruthers (Political Science), Christensen (Spanish), Clement (Economics), Cunniff (History), Del Castillo (Chicana and Chicano Studies), De la Luz Ibarra (Chicana and Chicano Studies), Espin (Women's Studies), Esser (Art), Fredrich (Geography), Ganster (Institute for Regional Studies of the Californias), Gerber (Economics), Griffin (Geography), Griswold del Castillo (Chicana and Chicano Studies), Hartung (Communication), Head (Spanish), Herzog (Chicana and Chicano Studies), Hicks (English and Comparative Literature), Hidalgo (Spanish), Higgs (Spanish), Lippold (Anthropology), Loveman (Political Science), Lyman-Hager (Language Acquisition Resource Center), Mattingly (Geography and Women's Studies), Murillo (History), Nericcio (English and Comparative Literature), Ortiz (Chicana and Chicano Studies), Rivera-Garza (History), Robinson (Spanish), Rodriguez (Chicana and Chicano Studies), Segade (Spanish), Silverman (Portuguese), Stromberg (Language Acquisition Resource Center), Villarino (Chicana and Chicano Studies), Watson, M. (Women's Studies), Weeks (Geography), Wilson (Spanish), Young (Spanish).

Offered by Latin American Studies

Master of Arts degree in Latin American studies.

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 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.

Latin American Studies Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 03081)

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. Portuguese 101, 201, and 301 or Spanish 101, 102, 103, 202, 211, 212 (13-22 units); 12 units selected from Anthropology 102, Economics 101 and 102, Geography 102, History 115A-115B, Latin American Studies 101, Political Science 101 and 103.

Foreign Language Requirement. The foreign language requirement is automatically fulfilled through preparation for the major.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units selected from courses in anthropology, art, Chicana and Chicano studies, economics, geography, history, Latin American studies, political science, Portuguese, sociology, Spanish, and women's studies, with not less than 12 units in one field and nine in each of two other fields. At least 33 units must be in courses having Latin American content.

Courses acceptable for the Latin American studies major include:

Latin American Studies 495, 498, 530, 531, 560, 570, 575, 580; Anthropology 442*, 508, 509, 582*, 583*; Art 557, 577; Chicana and Chicano Studies 306, 310, 335, 340, 350A, 355, 375, 376, 380, 498; Communication 591*; Comparative Literature 445, 561*, 562*, 563*, 571*, 594*; Economics 336, 360, 365, 464, 561, 565, 592*; English 501, 502; Geography 323, 324, 498*, 507, 509, 545, 554, 560; History 415A-415B, 541A, 551A-551B, 552, 554, 555, 556, 557, 558, 559; Political Science 361, 531, 537, 555, 560, 566, 567, 568, 577; Portuguese 535; Public Administration and Urban Studies 580; Sociology 350, 450*, 517, 522, 527, 555*, 556*; Spanish 341*, 342*, 406A-406B*, 515, 520, 522; Television, Film, and New Media 363*, 562*; Women's Studies 310, 515, 521, 522, 530, 536, 553*, 565, 580*, 596.

Courses numbered 496, 499, and 596 of relevant content in the above departments may be used for the Latin American studies major.

* Indicates course with prerequisites not included in requirements listed above.

+ Acceptable when of relevant content.

Latin American Studies Major

(Imperial Valley Campus)

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 03081)

At the Imperial Valley campus the major in Latin American studies is essentially the same as the Latin American studies major offered at the San Diego campus.

It 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 Imperial Valley College, or their equivalent: elementary Spanish; intermediate Spanish or bilingual Spanish; intermediate conversational Spanish or bilingual oral Spanish; advanced conversational Spanish; and 12 units selected from physical anthropology, physical 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.

Foreign Language Requirement. The foreign language requirement for graduation is automatically fulfilled through coursework for preparation for the major.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

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: Latin American Studies 344; Anthropology 442; Art 496 (when relevant); Chicana and Chicano Studies 335, 350A, 376; Economics 365, 464, 496 (when relevant); Geography 323, 324, 496 (when relevant); History 415A-415B, 496 (when relevant), 551A-551B, 552, 557, 558; Political Science 566, 567, 568; Sociology 350, 450, 556 (when relevant); Spanish 406A-406B, 515; Women's Studies 310 (when relevant).

Latin American Studies Minor*

The minor in Latin American studies consists of a minimum of 15 units of Latin American content courses. At least 12 of these units must consist of upper division courses. In addition, students must complete Spanish 103 or Portuguese 101 or the equivalent. No more than six units may be drawn from any one department's or program's offerings. Units may be selected from among the following:

Latin American Studies 101, 495, 498, 530, 531, 560, 570, 575, 580; Anthropology 442, 582 (when relevant); Chicana and Chicano Studies 306, 310, 335, 340, 350A, 355, 375, 376, 380, 498; Comparative Literature 445; Economics 336, 360, 365, 464, 565, 592; Geography 323, 324; History 115A-115B, 415A-415B, 541A, 551A-551B, 552, 554, 555, 556, 557, 558, 559; Music 596; Political Science 361, 566, 567, 568, 577; Portuguese 535; Public Administration 580 (when relevant); Sociology 350 (when relevant), 450 (when relevant), 555, 556 (when relevant); Spanish 341*, 342*, 406A-406B, 515, 520, 522; Television, Film, and New Media 363 (when relevant), 562; Women's Studies 310 (when relevant), 580 (when relevant).

Courses numbered 496, 499, and 596 of relevant content in the above departments may be used for the Latin American studies 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. In designing their Latin American studies programs for a minor, students may not include courses drawn from their major department.

* Additional prerequisites may be required for courses in the minor.

Courses

LOWER DIVISION COURSE

101. Latin American Heritage (3)

Introduction to Latin American cultures and peoples from an interdisciplinary perspective.

UPPER DIVISION COURSES (Intended for Undergraduates)

344. Cooperative Studies at the Universidad Autonoma de Baja California (3-9) (Offered only at IVC)

Prerequisites: Spanish 301 and 302; declared major in Latin American studies.

Latin American studies majors will attend classes with a Latin American focus at the Universidad Autonoma de Baja California; SDSU/IVC faculty will cooperate in supervision and evaluation of students. May be repeated with new content. Maximum credit nine units.

495. Latin American Studies Internship (3) Cr/NC I, II

Prerequisite: 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.

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.

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.

499. Special Study (1-3)

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)

530. Civilization and Culture of Pre-Columbian America (3)

Prerequisite: Upper division standing.

Indigenous cultures of U.S./Mexico border region, Mexico, Central America from a multidisciplinary perspective. Geographical, religious, political, economic, and social realities. Not open to students with credit in Art 561.

531. Visual Representation of Latin American Culture (3)

Prerequisite: Upper division standing.

Latin American civilization and culture from the Encounter to present. Visual expressions of culture including rituals, ceremonies and festivals, examined from a multi-disciplinary perspective. Not open to students with credit in Art 562.

560. Latin America After World War II (3)

Prerequisites: Latin American Studies 101; History 115A, 115B; and either Political Science 566 or consent of instructor.

Major socioeconomic and political changes in Latin America since World War II and inter-American relations during the same period. Includes guest lecturers.

570. The City in Latin America (3)

Prerequisites: Six upper division units in Latin American content courses.

Contemporary Latin American cities. Processes leading to urban growth (migration, regional economic development), social conditions (housing, jobs, squatter settlements), urban landscape (design, architecture), and management (environment, transport, land use).

575. Art and Culture in the U.S./Mexico Border Region (3)

Prerequisite: Upper division standing.

Settlement and culture along the U.S./Mexican border seen through a multi-disciplinary study of art, architecture, artists, and patronage.

576. Frida Kahlo and Her Circle: Mexican Artists and the Challenge of Modernity (3)

Prerequisite: Upper division standing.

Work and life of Frida Kahlo, her influence on artists and thinkers who shared her world, and influence she continues to have on art of Mexico and the U.S.

580. Special Topics (1-4)

Prerequisite: 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.

Liberal Studies

In the Division of Undergraduate Studies

OFFICE: University Advising Center (Student Services 1641)
TELEPHONE: (619) 594-6668
FAX: (619) 594-1553

Faculty

Coordinator: Roeder, P. (Division of Undergraduate Studies)

Allison (English), Bar-Lev (Linguistics), Dunn (History), Fisher (Biology), Goldberg (Physics), Griswold (English), Lujan (Teacher Education), McKerrow (Theatre), Park (Teacher Education), Sowder, L. (Mathematical Sciences), Starr (History), Stites (History), Vartanian (History)

Committee: Anderson, B. (Theatre), Bezuk (Teacher Education), Cook, S. (University Advising Center), Cottrell, A. (Sociology), McDonald (Music), Roeder, P. (Natural Science), Sowder, L. (Mathematical and Computer Sciences)

Offered by the Division

Major in liberal studies with the B.A. degree in liberal arts and sciences.

The Major

The liberal studies major is designed primarily for students who intend to teach at the elementary level. The goal of the program is to provide an educational experience which prepares liberally educated individuals capable of thinking critically, writing clearly and effectively, analyzing evidence, and appreciating the connections between different subjects. The individuals who complete the major should find opportunities in a variety of careers, in addition to teaching, if they so choose. Furthermore, they should have developed a love of learning which takes them along new pathways throughout their lives and makes them effective citizens in a complex, rapidly changing world.

The liberal studies program is a diversified subject matter preparation program approved by the California Commission on Teacher Credentialing (CTC). Students who complete the program do not have to satisfy subject matter competency by passing the Multiple Subject Assessment for Teachers (MSAT) examination. Students in all other majors must pass this examination before being admitted to a multiple subject credential program in California.

The liberal studies program is integrative. In the cornerstone course, Liberal Studies 300, which is taken at the beginning of the junior year, students probe the relationships between subject areas, are introduced to the assessment portfolio, and carry out thirty or more hours of observation and volunteer work in a public elementary school. Completion of a satisfactory assessment portfolio is required **both** for graduation from the major and to receive the waiver for the MSAT prior to entering a credential program. The portfolio serves as the summative assessment for the major; it challenges students to synthesize and think reflectively about what they have learned. Students select samples for the portfolio primarily from their upper division courses; however, some samples from lower division courses are encouraged to show the student's growth. In addition to the samples, students independently write reflections, a capstone essay, and other special entries.

The major requires courses in the seven major subject areas identified by the CTC: language and literature (including linguistics and foreign language), mathematics, science, social science and history, arts and humanities, physical education, and human development. The core of the program is built from carefully selected general education courses. Thus by completing the requirements listed below, a student automatically completes all the general education courses required for graduation. Students, however, should be aware that not all general education courses satisfy the requirements listed under preparation for the major; they must follow the guidelines listed below. In addition to the general education courses, liberal studies students have an opportunity to take a number of courses designed specifically for future elementary teachers including children's literature; the four semester mathematics sequence; an upper division process and inquiry science course; several activity based art, drama, and music courses; and a physical education of children course.

During their junior and senior years, students complete a specialization which consists of twelve units of upper division work in a given discipline. Specializations are available in a wide variety of disciplines. With the approval of the faculty adviser, students are allowed to substitute minors if they choose to do the additional coursework. The specialization is designed to allow future teachers to help each other, to facilitate later earning a master's degree in the chosen field, and potentially to serve as the spring board to a new career if so desired. Students should choose their specializations early; most specializations require that they choose the correct prerequisites at the lower division level.

Assuming students have to complete all three semesters of a foreign language at the college level, a total of 122 out of the 124 units required for a bachelor of liberal arts and sciences degree are used to satisfy specific requirements. If students choose to complete their fifth year credential program at San Diego State University, they must also complete additional courses which serve as prerequisites for the Cross-cultural, Language, and Academic Development (CLAD) emphasis which was added to the multiple subject and bilingual credentials in 1994. Due to the complexity of the major and the subsequent credential program, good advising is essential. Advising for the major plus portfolio workshops are provided by the University Advising Center. A newsletter sent once or twice each semester provides essential information concerning opportunities, courses, portfolio requirements, and other pertinent information. Requirements for admission to the Multiple Subject Credential (CLAD and B/CLAD) programs at San Diego State University are listed in the catalog under Teacher Education (regular credential) or Policy Studies (bilingual credential). Further information may be obtained at the Center for Careers in Education (ED-100) or at the Policy Studies department office (ED-152).

Requirements for Subject Matter Preparation Certification

For subject matter certification needed to enter a credential program, a student must complete all the requirements, including a satisfactory portfolio, and earn a "C" or better grade in all but one of the courses in the major and specialization (or minor). If a course is repeated, the highest grade will count.

Courses

UPPER DIVISION COURSES (Intended for Undergraduates)

300. Introduction to Liberal Studies (3)

Prerequisites: Preparation for the major completed or to be completed concurrently. Completion of lower division Writing Competency and Entry-Level Mathematics requirements.

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.

498. Assessment in Liberal Studies (0.5-1) Cr/NC

Prerequisites: Successful completion of two upper division semesters of liberal studies major; upper division major code.

Portfolio development including reflections upon educational experiences in each subject area and role as future educator. Students will investigate their role as citizens in a complex world, explore connections between subject areas, and reflect upon learning and teaching.

Liberal Studies Major

With the B.A. Degree in Liberal Arts and Sciences (Premajor Code: 49012) (Major Code: 49015)

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."

Completion of the Liberal Studies major fulfills General Education requirements.

A minor is not required with this major.

Foreign 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 section of catalog on "Graduation Requirements."

Preparation for the Major. (54 units)

Language and Literature

1. *Composition* – Three units selected from Africana Studies 120; Chicana and Chicano Studies 111B; Linguistics 100; Rhetoric and Writing Studies 100.
2. *Composition* – Three units selected from Africana Studies 200; Linguistics 200; Rhetoric and Writing Studies 200.
3. *Speech* – Three units selected from Africana Studies 140; Chicana and Chicano Studies 111A; Communication 103.
4. *Literature* – Three units selected from Comparative Literature 270A, 270B; English 220.

Mathematics

5. *Mathematics* – Mathematics 210 (Grade of C or better required for entrance into SDSU Multiple Subject Credential program).
6. *Mathematics* – Mathematics 211.

Science

7. *Life Sciences* – Three units (or four units including laboratory) selected from Biology 100, 100L, 101, 101L.
8. *Physical or Earth Sciences* – Three units (or four units including laboratory) selected from the **physical** sciences to include Chemistry 100; Natural Science 100; Physics 103, 107; or three units (or four units including laboratory) selected from **earth** sciences to include Astronomy 101, 109; Geography 101, 101L, 103; Geological Sciences 100, 101.
9. *Laboratory* – from either category 7 or 8.

Social Science and History

10. *Social/Global Perspective* – Anthropology 102, Geography 102, or Sociology 101.
11. *Western or World History* – Three units selected from History 100, 101, 105 (recommended), 106.
12. *American Institutions* – Six units selected from General Education American Institutions courses (see section of catalog on "Graduation Requirements" for approved list). Recommended: History 110A, 110B.

Visual and Performing Arts and Humanities

13. *Music* – Music 102 (Grade of C or better required for entrance into SDSU Multiple Subject Credential program).
14. *Art/Dance/Theatre* – Three units selected from Art 157, 158, 258, 259; Dance 181; Theatre 100, 120.
15. *Values and Ethics* – Three units selected from Philosophy 101, 102, 103; Religious Studies 101, 102.

Physical Education

16. *Physical Education* – Exercise and Nutritional Sciences 241A, 241B (Grade of C or better required for entrance into SDSU Multiple Subject Credential program).

Human Growth and Development

- 17a. *Individual Perspective* – Psychology 101.
- 17b. *Child Development* – Psychology 230.

Upper Division Writing Requirement. English 306W (very strongly recommended) or Rhetoric and Writing Studies 500W, with a grade of C (2.0) or better.

Upper Division Major. (43.5 units)

Cultural Diversity Requirement: One three-unit course in the major or specialization indicated in this curriculum by an asterisk(*)

Introduction to the Major

18. Liberal Studies 300.

Language and Literature

- 19, 20. *Composition/Literature* – English 306A and 306W. (English 306A and 306W must be taken together. Student must achieve a grade of C or higher in English 306W.)
OR
Rhetoric and Writing Studies 500W (Students must achieve a grade of C or higher.); and three units selected from Africana Studies 460*, Chicana and Chicano Studies 335*, Comparative Literature 470*, English 301, 302, 494, 501, Women's Studies 352*.
21. *Language Structure* – Linguistics 420.
22. *Child Language Acquisition* – Linguistics 452.

Mathematics

23. *Mathematics* – Mathematics 312.
24. *Mathematics* – Mathematics 313.

Science

Courses for the major together with courses for preparation for the major shall include at least one course from each of the three science categories: life science, physical science, earth science.

25. *Science* – Four units selected from:
Physical: Natural Science 412A or 412B.
Earth: Natural Science 412D.
Life: Natural Science 412C.
26. *Science Elective* – Three units selected from:
Physical: Physics 201 (restricted to students in Communicative Disorders specialization), Physics 301.
Earth: Astronomy 301; Geological Sciences 301, 303, Oceanography 320.

Life: Biology 315, 319, 320, 321, 324, 327, 336, 339.

Interdisciplinary: (May be selected when three categories have been met) Natural Science 315, 316, 317, 333.

Social Science and History

If Number 11 was satisfied with Western Civilization, then one course must be taken from the Non-Western Civilization section; if Number 11 in preparation for the major was satisfied with World History, then one course must be taken from the Western Civilization section.

27. *History* – Three units selected from

Non-Western Civilization: Africana Studies 470*; History 415A*, 415B*, 420*, 421*, 473A*, 473B*, 475A*, 475B*.

OR

Western Civilization: History 305A, 305B, 407A, 407B.

28. *History* – Three units selected as follows (one course for requirement 27 or 28 must be from the Department of History):

- (1) If the cultural diversity requirement is not being completed in requirement 20, 27, 30, or 33, select one course: Africana Studies 470*; American Indian Studies 440*; Chicana and Chicano Studies 350A*, or 350B*; History 415A*, 415B*, 420*, 421*, 473A*, 473B*, 475A*, 475B*.
- (2) If background in **early** United States history or California history needs to be improved, select History 310A (only if you did not take History 110A), 410A, or 541A.
- (3) If both of the above have been satisfied, select any course from (1), (2), or Africana Studies 471A, 471B, History 310B (only if you did not take History 110B), 410B, or 541B.

Visual and Performing Arts and Humanities

29. *Art/Music/Theatre* – Three units selected from Art 387; Music 343; Theatre 310, 315.

30. *Music and Humanities* – Three units selected from number 29 above or from the following: Africana Studies 480; Chicana and Chicano Studies 310*; Humanities 401, 402, 403, 404; Music 351A, 351B, 351C, 351D.

Human Growth and Development

31. *Learning and Development* – Three units selected from Child and Family Development 371; Communicative Disorders 322.

Assessment

32. *Assessment in Liberal Studies* – Liberal Studies 498 and completion of the Liberal Studies Assessment Portfolio.

In order to graduate with the Liberal Studies major, every student must complete a satisfactory portfolio.

To qualify for admission into a credential program in California a student must satisfy subject matter competency. In order to be certified, Liberal Studies students must complete all requirements, submit a satisfactory portfolio, AND earn a "C" or better grade in all but one of the courses in the major and specialization (or minor); i.e., all required upper division courses. When attempting to improve a grade, any course listed under the requirement may be taken; it is not necessary to repeat the same course.

Approved Specialization (12 units)

33. *Specialization* – (See list of approved specializations below)

All students shall complete a 12 unit specialization.

Many specializations require selection of lower division prerequisites included in preparation for the major. If additional prerequisites are required these are noted. Students may *not* double count courses in the upper division major (Numbers 18-32) and the specialization.

The specialization will be waived for any student who declares and completes an official minor or a second major. The minor or second major must be approved by the Liberal Studies Adviser.

In order to maximize the usefulness of the specialization, students should consult with a liberal studies adviser before choosing their specialization courses. By making careful choices, students can often earn a supplementary authorization, which will allow them to teach at the middle school level.

Additional Prerequisites for SDSU Multiple Subject Credential Program

In addition to the requirements listed under preparation for the major and upper division major, Education 451 is required for entrance into the Multiple Subject Credential program at SDSU; and Education 451, Linguistics 550, and Policy Studies in Language and Cross-Cultural Education 515 are required for the B/CLAD credential program at SDSU.

Approved Specializations

Africana Studies

Twelve units selected from Africana Studies 330, 331, 332, 362, 380*, 420*, 445*, 452, 460*, 461, 463*, 471A, 471B, 480, 485.

American Indian Studies

American Indian Studies 320*, 440*, 470*, and three units selected from American Indian Studies 303, 420, 430*.

Anthropology

Prerequisite: Anthropology 102.

Anthropology 350*; nine units selected from Anthropology 410, 424, 430*, 432, 439; of these nine units, three units may also be selected from Anthropology 442*, 444, 445*, 446*, 448*, 449*, 450*, or 452*.

* Cultural diversity course.

Art

Prerequisite: At least three units selected from Art 258, 259.

Art 560*, 568; three units selected from Art 308, 387; and three units selected from Art 557*, 558, 577*.

Students with sufficient lower division coursework may request a specialization in Studio Arts to be approved by the Art Department.

* Prerequisites: Art 258 and 259.

Biology

Prerequisite: Biology 100, 100L or 101, 101L.

Twelve units selected as follows: Biology 315; Biology 336 and 436; Biology 319; Biology 499 Research (1-2 units).

Chicana and Chicano Studies

Twelve units selected from Chicana and Chicano Studies 310* (recommended), 320*, 324, 335*, 350A*, 350B*, 376*, 464 (recommended), 480 (recommended).

* Cultural diversity course.

Child Development

(Includes one additional upper division unit.)

Prerequisite: Child and Family Development 270 or Psychology 230 (other prerequisites are waived.)

Child and Family Development 335, 371, 375, 376L, 478. If Child and Family Development 371 is used in the major, select three units from Child and Family Development 437 or 537.

Classics

Classics 310, 320, 330, 340.

Communicative Disorders

Deaf Education Focus: (Includes one additional upper division unit.) Recommended prerequisites: Communicative Disorders 159, 259, 289.

Liberal Studies

Communicative Disorders 350, 357* (1 unit), 550, 562; Special Education 500.

Specialist Credential Focus: Required prerequisites: Communicative Disorders 159, 205, 259, 289, Physics 201, Psychology 260.

Communicative Disorders 340, 340L, 350, 357* (2 units), 550.

* Prerequisites waived for Liberal Studies majors.

Comparative Literature

Prerequisite: Three units selected from Comparative Literature 210, 270A, 270B.

Twelve units selected as follows: three units selected from Comparative Literature 405, 511, 512, 514; three units selected from Comparative Literature 440*, 445*, 455*, 460*; three units selected from Comparative Literature 470*, 561, 562, 563, 571; three units selected from those above or special topics courses as approved by the adviser.

* Cultural diversity course.

English

Prerequisite: Comparative Literature 270A, 270B; or English 220.

Shakespeare: Three units selected from English 302 (recommended), 533;

Genre Studies: Three units selected from Comparative Literature 470*, 561, 562, 563, English 491 (with approval of adviser), 493, 501, 502, 526 (with approval of adviser);

Literary History: Three units selected from English 405, 494, 519, 520, 522, 523, 524, 525, 540B, or 560B;

Choice: Three additional units selected from the Genre Studies or Literary History course listed above.

* Cultural diversity course.

Foreign Language

Twelve upper division units in any foreign language. Students who plan to enter the Bilingual Cross-Cultural Language and Academic Development (B/CLAD) credential program, see specialization in Spanish. Other languages offered at San Diego State University include Chinese, Classics (Greek and Latin), French, German, Italian, Japanese, Portuguese, and Russian. Additional prerequisites may be required.

Geography

Prerequisite: Geography 102.

Geography 312*, 321, 354, 370.

History

United States History Track: A six unit sequence selected from History 410A and 410B or 541A and 541B; six units selected from Africana Studies 471A, 471B; American Indian Studies 440*; Chicana and Chicano Studies 350B*; History 422*, 442A, 442B, 540, 545A, 545B, 546A, 546B, 549; Women's Studies 341A, 341B. If one of the courses in the required sequence is used in the major, select an additional three units from the above choices.

World History Track: A six unit sequence selected from History 411 and 412 or History 305A and 305B; six units selected from Africana Studies 472*, History 415A*, 415B*, 420*, 421*, 473A*, 475A*, 488*, 500A, 500B, 501. If one of the courses in the required sequence is used in the major, select an additional three units from the above choices.

* Cultural diversity course.

Linguistics

Prerequisite: Linguistics 420.

Linguistics 550; nine units selected from Linguistics 524, 551, 552, 553.

Mathematics

Mathematics 121. Nine units selected from Mathematics 302*, 303, 414; Statistics 357*.

* Mathematics 121 acceptable as prerequisite.

Music

Prerequisites: Music 102; 110A, 110B, 110C, or 110D (1 unit); 115; 240.

Music 343, 345*; three units selected from Music 351A-351D, Africana Studies 480, Chicana and Chicano Studies 310*; three units selected from Music 369*, 370*, 374*, 375*, 376*, 380*, 385*, 386*, 389*, 445 (recommended).

* Consent of instructor required. Previous experience playing an instrument required except for Music 385 and 386.

Natural Science

(Includes one additional lower division unit and one additional upper division unit.)

Prerequisites: Biology 100, 100L, and Physics 107.

Three units selected from Physics 301, Natural Science 317, 333; three units selected from Geological Sciences 302, Biology 336, 341; three units selected from Geological Sciences 303, Oceanography 320; four units selected from Natural Science 412A, 412B, 412C, 412D.

Physical Education

Prerequisites: Exercise and Nutritional Sciences 241A, 241B.

Exercise and Nutritional Sciences 301+, 335+, 347A++, 347B++, 348+++, 398* (1 unit).

* Prerequisite: Exercise and Nutritional Sciences 241A, 241B.

** Prerequisite: Exercise and Nutritional Sciences 301.

+++Prerequisite: Exercise and Nutritional Sciences 347A, 347B.

Political Science

Twelve units selected from Political Science 301A, 301B, 302, 305, 334, 338, 346, 348, 357, 359, 361*, 362*, 363*, 375, 422, 425, 426, 436, 481, 530, 531, 562, 566, 567, 568.

Psychology

Prerequisite: Psychology 101. Additional prerequisite: Psychology 211.

Psychology 340; nine units selected from Psychology 350, 351, 432 (highly recommended), 452, 456.

Religious Studies

Prerequisite: Religious Studies 101 or 102.

Twelve units selected from Religious Studies 300 (highly recommended), 353, 354, 360, 363, 365 (recommended).

Social Science

Twelve units selected from at least three of the following categories: 1) Geography 312*, 321; 2) History 410A, 410B, 411, 412, 541A, 541B; 3) Political Science 305, 320, 321; 4) Sociology 320, 352, 421, 433, 450, 539.

Sociology

Prerequisite: Sociology 101.

Twelve units selected from Sociology 320, 352, 355*, 410, 421, 433, 441, 444, 445, 455, 517, 537, 539, 555.

Spanish

*Native Speakers** (Defined as high school graduates from a Spanish-speaking country.): Choose a different specialization.

*U.S. Hispanics** (Defined as students who have passed the Spanish Diagnostic Placement Examination. Examination must be passed prior to enrollment in Spanish 281 and 381.)

Prerequisite: Spanish 281.

Spanish 350, 381; three units selected from Spanish 405A, 405B, 406A, or 406B; and three units selected from Spanish 340, 341, 342 (provided you have not taken Chicana and Chicano Studies 350A or History 415A), or Spanish 448 (recommended).

*English Speakers** (Defined as native English speakers and other students who cannot pass the Spanish Diagnostic Placement Examination.)

Prerequisites: Spanish 202 and 212.

Spanish 301, 302, 350, and three units selected from Spanish 405A, 405B, 406A, or 406B.

Theatre

Prerequisite: Three units selected from Theatre 100 or 120.

Theatre 310, 315, 480, 510.

Women's Studies

Twelve units selected from Women's Studies 310*, 320*, 325*, 340*, 351, 352*, 370*, 375*, 385*.

* Cultural diversity course.

* Contact the Department of Policy Studies in Language and Cross-Cultural Education about the Spanish Language Proficiency and Cultural Awareness Examination which is a prerequisite for the BCLAD bilingual credential program.

Linguistics

In the College of Arts and Letters

OFFICE: Business Administration 327

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FAX: (619) 594-4877

WWW: <http://www-rohan.sdsu.edu/dept/linguist/101.html>

Faculty

Emeritus: Elgin, Frey, Seright

Chair: Choi

Professors: Bar-Lev, Choi, Donahue, Johns, Kaplan, Robinson, Underhill

Associate Professors: Poole, Webb

Assistant Professor: Samraj

Offered by the Department of Linguistics and Oriental Languages

Master of Arts degree in linguistics.

Major in linguistics with the B.A. degree in liberal arts and sciences.

Teaching major in linguistics for single subject teaching credential in English.

Minor in linguistics.

Certificate in applied linguistics and English as a second language (ESL).

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, communicative disorders, ethnic studies, a foreign language, history, journalism, literature, philosophy, psychology, public administration and urban studies, sociology.

In addition to the major and minor programs, the Department of Linguistics and Oriental Languages offers a Certificate in Applied Linguistics and English as a Second Language (ESL). This certificate 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.

Linguistics Major

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 15051)

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, communicative disorders, ethnic studies, a foreign language, history, journalism, literature, philosophy, psychology, public administration and urban studies, and sociology.

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.

Foreign Language Requirement. Competency equivalent to that which is normally attained through three college semesters of a foreign language with a B (3.0) average, or the equivalent. Refer to section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or Linguistics 305W or 396W or Rhetoric and Writing Studies 305W or 500W with a grade of C (2.0) or better.

Major. A minimum of 24 upper division units is required: at least 18 of these must be in Linguistics (and those 18 must include Linguistics 420 or 520 and 521 and 522); with the approval of the adviser, up to six units may be selected from related fields.

Linguistics Major

In preparation for the Single Subject Teaching Credential in English

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 15051)

Preparation for the Major. Linguistics 101; Linguistics 100 or Rhetoric and Writing Studies 100; Linguistics 200 or Rhetoric and Writing Studies 200; Comparative Literature 270A or 270B or English 220; Humanities 140 or Theatre 120; three units selected from Communication 200, English 280, 281, Journalism 220, Theatre 115, and one of the following sequences: English 250A and 250B or English 260A and 260B. (24 units)

Foreign Language Requirement. Competency equivalent to that which is normally attained through three college semesters of a foreign language with a B (3.0) average, or the equivalent. Refer to section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Linguistics 305W or 396W or English 508W or Rhetoric and Writing Studies 500W with a grade of C (2.0) or better.

Major. A minimum of 39 upper division units to include Linguistics 420 or 520; Linguistics 521, 522, 550, 551; Linguistics 525 or 530; Linguistics 452 or 552; Comparative Literature 562 or Theatre 310 or 480; English 533; Rhetoric and Writing Studies 509. Three units selected from Africana Studies 460, 461, 462, 463, 464; American Indian Studies 430; Chicana and Chicano Studies 335, 464; English 519, 520; Women's Studies 352. Three units selected from Communication 360, 371, 391, 407, 408, 491; English 541A, 541B, Philosophy 531; Theatre 460B. One course selected from the following area not covered at the lower division level: English 560A or 560B (for students who took English 250A and 250B); English 522, 523, 524, 525 (for students who took English 260A and 260B).

Minor in Linguistics

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.

Required: Linguistics 101 or 420 or 520. Twelve units selected from Linguistics 240, 242, 296, 354, 410, 420 or 520, 452, 453, 496, 499, 521, 522, 525, 530, 551, 552, 553, 596, and no more than one course from Anthropology 410, Chinese 352, Communication 530, German 505, Philosophy 531, 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.

Applied Linguistics and English as a Second Language (ESL) Certificate

The Department of Linguistics and Oriental Languages offers a basic and an advanced Certificate in Applied Linguistics and English as a Second Language (ESL). The basic certificate requires 12 units to include Linguistics 420 or 520, 452 or 552, 524 or 551, and 550. 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 practicum requirement. In order to enroll, you must contact the certificate adviser in the Department of Linguistics and Oriental Languages. Courses in the certificate may be counted toward the major in linguistics but may not be counted toward the minor.

Refer to the Graduate Bulletin for information on the advanced certificate.

Courses

LOWER DIVISION COURSES

General

99. Writing for Graduate Students (3) (Offered only in Extension)

To assist graduate students, particularly those for whom English is a second language, in writing theses or other assigned papers for courses in their majors. Focus on students' writing needs, including writing style, mechanics, grammar, and other issues. Does not apply to undergraduate degrees or credentials. (Formerly numbered Linguistics 397.)

101. Introduction to Language (3)

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.

240. A Foreign Language Experience (1)

Practice in strategies for acquisition of elementary fluency in speaking a foreign language, through a linguistics-based (acquisition-oriented) approach. May be repeated with new content. Students may not repeat content covered in Linguistics 242. Maximum credit three units.

242. Experiences in Foreign Language Study (3)

Study of multiple languages, to enhance language-learning abilities through a linguistics-based (acquisition-oriented) approach. Students may consult with department to receive list of languages offered. Students may not repeat content covered in Linguistics 240.

250. Directed Language Study (3) I, II

Prerequisite: Consent of instructor.

Directed independent study of a foreign language not offered at San Diego State University 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 six units.

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.

English Composition for International Students

100. English Composition for International Students (3)

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 (including ISEPT) or verification of exemption; proof of Cr in Rhetoric and Writing Studies 92A or 92B or 97A or 97B, or notification from the Department of Rhetoric and Writing Studies.

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 Africana Studies 120 or Chicana and Chicano Studies 111B or Rhetoric and Writing Studies 100 or higher-numbered composition course.

200. Advanced English for International Students (3)

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 or Rhetoric and Writing Studies 200.

UPPER DIVISION COURSES (Intended for Undergraduates)

305W. Advanced Composition for International Students (3)

Prerequisites: Satisfies University Upper Division Writing requirement for students who have completed 60 units, fulfilled the Writing Competency requirement, and completed the General Education requirement in Communication and Critical Thinking. **Proof of completion of prerequisites required:** Test scores or verification of exemption; copy of transcript.

Advanced expository writing, with practice in the various associated skills (organization, research, presentation, rhetoric). The goal is to enable non-native English speakers to function competently with written English on advanced university levels.

354. Language and Computers (3)

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

Computers, computer programming languages, and "artificial intelligence" viewed from perspective of human language.

396W. Writing Proficiency (1)

Prerequisite: Consent of instructor. Limited to linguistics majors. Satisfies University Upper Division Writing requirement for students who have completed 60 units, fulfilled the Writing Competency requirement, and completed the General Education requirement in Communication and Critical Thinking. **Proof of completion of prerequisites required:** Test scores or verification of exemption; copy of transcript.

Upper division writing course taken in conjunction with any 500-numbered linguistics course. Emphasizes composition skills in research methods, essay organization, paragraphing, sentence structure, and diction, all related to the particular 500-level linguistics course chosen.

410. History of English (3)

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

The history of English and its present day use.

420. Linguistics and English (3)

Prerequisite: Completion of the General Education requirement in Foundations 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.

452. Language Acquisition (3)

Prerequisite: Linguistics 420 or 520.

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.

453. Language Issues in the Secondary School (3)

Prerequisite: Linguistics 420.

Linguistic minorities and dialect variation in interethnic communication. Language development from a socio-interactionist perspective. Development of discourse and literacy, and their underlying cognitive and linguistic foundations.

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.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

520. Fundamentals of Linguistics (3)

Prerequisite: Upper division standing.

Principles of modern linguistics, with attention to English grammar (syntax, morphology, phonology). Language change, dialects, sociolinguistics, psycholinguistics, language acquisition.

521. Phonology (3)

Prerequisite: Linguistics 420 or 520.

Introduction to the theoretical principles of transformational-generative phonology.

522. Syntax (3)

Prerequisite: Linguistics 420 or 520.

Introduction to the theoretical principles of transformational-generative syntax.

524. American Dialectology (3)

Prerequisite: Upper division standing.

Development of American English. Regional, social, and ethnic differences in pronunciation, grammar, and vocabulary. Differences in men's and women's language. Black English.

525. Semantics and Pragmatics (3)

Prerequisite: Linguistics 420 or 520.

Advanced semantic theory; systematic analysis of the interaction of sequences of language with real world context in which they are used.

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.

550. Theory and Practice of English as a Second Language (3)

Prerequisite: Linguistics 420 or 520.

The nature of language learning; evaluation of techniques and materials for the teaching of English as a second language.

551. Sociolinguistics (3)

Prerequisite: A course in introductory linguistics.

Investigation of the correlation of social structure and linguistic behavior.

552. Psycholinguistics (3)

Prerequisite: Linguistics 420 or 520.

Psychological and mental processes related to comprehension, production, perception, and acquisition of language in adults and children.

553. Bilingualism (3)

Prerequisite: Linguistics 420 or 520 or Communicative Disorders 500.

Bilingual societies; language choice by bilinguals; bilingual language acquisition; effects of bilingualism on language structure and use.

596. Selected Topics in Linguistics (1-3)

Prerequisite: Upper division standing.

Advanced study of selected topics. See Class Schedule for specific content. May be repeated with new content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES
Refer to Bulletin of the Graduate Division.

Management

In the College of Business Administration

OFFICE: Student Services 3356

TELEPHONE: (619) 594-5306

FAX: (619) 594-3272

A Member of the AACSB—The International Association for Management Education.

Faculty

Emeritus: Atchison, Brady, Mitton, Pierson, Robbins, Srbich

Chair: Butler

Professors: Belasco, Butler, De Noble, Ghorpade, Hampton, Hergert (Dean of the College of Business Administration), Marino (Associate Dean and Director, Graduate Program), Wright

Associate Professors: Dunn, Ehrlich, Rhyne

Assistant Professors: Jung, Lovett

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.

Teaching major in business for the single subject teaching credential.

Minor in management.

Minor in small business management (available at Imperial Valley Campus only).

Certificate in business administration (available at Imperial Valley Campus only).

Admission to the Major

The undergraduate business administration program at San Diego State University is structured such that students desiring a business administration major are first admitted to the pre-business administration major for their first two years of university work. During these first two years students should complete general education courses and a common core of nine lower division preparation for the business major courses – Accountancy 201, Financial Accounting Fundamentals; 202, Managerial Accounting Fundamentals; Finance 140, Legal Environment of Business; Economics 101, Principles of Economics (Macro); Economics 102, Principles of Economics (Micro); Information and Decision Systems 180, Principles of Information Systems; Information and Decision Systems 290, Business Communication; Mathematics 119, Elementary Statistics for Business; and Mathematics 120, Calculus for Business Analysis. These prerequisite courses may not be taken Cr/NC; the minimum grade in each class is C. All students must have fulfilled the SDSU Mathematics Competency and SDSU Writing Competency requirements and have completed 56 college units.

Supplemental admissions criteria must be met before students may declare an upper division major and be eligible for upper division courses. For current information concerning admissions criteria and procedures, contact the Business Undergraduate Program Office (BA 448).

Business administration majors may not complete a minor in the College of Business Administration.

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 is concerned that each individual upper division student makes reasonable academic progress toward earning a degree. To this end, the College will counsel students who have earned less than a “C” (2.0) average each semester. Further, such students will be warned that continued poor performance may result in their removal from any business major.

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—The International Association for Management Education accredited program. Exceptions require thorough documentation evidencing the above standards.

The Major

Managers are responsible for achieving organizational objectives by coordinating money, materials, machines, and most important of all, the efforts of people. Managers set objectives, establish policies, plan, organize, direct, communicate, and make decisions. Since their principal concern is solving problems, managers are continually defining problems and seeking solutions.

To be an effective manager, an individual needs a broad knowledge of the practice of management, the workings of business and the economy, and the behavior of people. The knowledge obtained in the bachelor's degree should be sufficient to qualify the student for a broad range of beginning managerial positions in business organizations. The graduate in management is prepared not only for managerial functions, but for those functions set within the context of a particular type of operation.

Recent government and private manpower studies indicate that the demand for professional managers should continue to increase. While

the types of employment secured by management graduates are varied, a recent study conducted by the management department showed that many graduates have gone into the following types of positions:

Production and operations managers supervise manufacturing and service operations, and are responsible for scheduling production and operations activities and controlling operational costs;

Sales managers, hire, train, and supervise sales personnel, evaluate the work of sales people, and develop incentive programs;

Financial managers supervise operations in banks, security exchanges, credit unions, and savings and loan associations;

Merchandising managers supervise operations in retail stores;

Organization and management analysts design and evaluate organizational structures and jobs.

International managers supervise foreign-based manufacturing and/or marketing operations for American companies; and

Corporate planners develop strategic plans for corporations.

Management Major

**With the B.S. Degree in Business Administration
(Major Code: 05061)**

Preparation for the Major. Accountancy 201, 202; Finance 140; Information and Decision Systems 180, 290; Economics 101, 102; Economics 201 or Statistics 119; and Mathematics 120 or 150. (27-29 units)

These prerequisite courses may not be taken Cr/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.**

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. Thirty-six upper division units consisting of Management 350, 352, 356, 401, 451, 454; Finance 323; Information and Decision Systems 301, 302; Marketing 370; three units from Business Administration 404; Management 405, 450 or 458; and three units selected from any upper division course in Management, Accountancy, Economics, Finance, Information and Decision Systems, Marketing, or Africana Studies 445, 452; American Indian Studies 320; Anthropology 350, 444; Asian Studies 560; Chicana and Chicano Studies 320; Communication 307, 371, 406, 407; Geography 353; History 480, 546A, 546B; Natural Science 333; Philosophy 329, 333; Political Science 346; Psychology 321, 326, 340; Social Work 350; Sociology 355, 401, 403, 410, 430, 531, 532; Women's Studies 320, 385. A "C" (2.0) average is required in the courses stipulated here for the major.

Of the 128 units required for the degree, at least 60 units must be at the upper division level. This includes the 36 units listed above, nine units of upper division General Education, and at least 15 units of upper division electives, chosen from within or outside of Business Administration. A minimum of 64 units of coursework applicable to the bachelor's degree must be completed outside the areas of business administration, economics, and statistics. This means that at least six units of electives (upper or lower division) must be completed in areas other than business administration, economics, and statistics. A maximum of six lower division units of accountancy courses may be used to satisfy degree requirements.

Business Major

**In preparation for the Single Subject Teaching Credential
With the B.S. Degree in Business Administration**

All candidates for the single subject teaching credential in business must complete all requirements for the applicable specialization as outlined in this section of the catalog under Policy Studies or Teacher Education. Students must complete the requirements of a major in one of the five departments within the College of Business Administration. In consultation with the single subject credential adviser in the College of Business Administration, undergraduate students must develop programs which fulfill the State credential requirements. All undergraduate majors must demonstrate office skills proficiency. Finance 589, Per-

sonal Financial Planning, is required of all teaching credential majors. Of the 128 units required for the degree, at least 60 units must be at the upper division level.

Student programs must be approved in advance by the College of Business Administration single subject credential adviser.

Management Minor

The minor in management consists of a minimum of 21 units to include Accountancy 201; Economics 101, 102; Management 350, 352, 356, and 451 or 454.

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 or in International Business may not complete a minor in the College of Business Administration.

Students must officially declare the minor before taking any upper division business courses. **Students must meet the prerequisites for the minor in effect at the time that they declare the minor.** The current prerequisites for admission to the management minor include completion of the following courses with a grade of C or better: Economics 101, 102, and a three unit course in statistics (Statistics 119 is recommended); completion of the General Education requirements in Communication and Critical Thinking; completion of an additional nine units in the department of the student's major, including at least three units of upper division courses. Students must also meet the GPA requirement in effect at the time that they declare the minor. Contact the Business Undergraduate Program Office (BA 448) for admissions criteria and procedures.

Small Business Management Minor

(Imperial Valley Campus)

The minor in small business management consists of a minimum of 24 units to include Economics 101, 102; Accountancy 201, 202; Management 350, 450; Marketing 370; and three units selected from Finance 323, Information and Decision Systems 360, Management 352.

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.

Certificate in Business Administration

(Imperial Valley Campus)

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; Finance 140; Information and Decision Systems 180, 290; Economics 101 and 102; Statistics 119 or Economics 201, and Mathematics 120 or 150.

The certificate will be awarded upon successful completion of the following courses: Finance 323; Information and Decision Systems 301 or 302; Management 350; Marketing 370; and three units selected from Finance 321, 589; or Management 356. (15 units)

Courses

LOWER DIVISION COURSE

202. Business Professions (1) Cr/NC I, II

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.

UPPER DIVISION COURSES (Intended for Undergraduates)

350. Management and Organizational Behavior (3) I, II

Prerequisite: Approved upper division business major, business minor, or another major approved by the College of Business Administration. **Proof of completion of prerequisite required:** Change of major form or other evidence of acceptable major code.

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.

352. Human Resource Management (3) I, II

Prerequisite: Management 350. Recommended: Information and Decision Systems 301.

The employment relationship. Functions and techniques; role of government, unions, behavior, and environmental variables in human resource management.

356. Social and Ethical Issues in Business (3) I, II

Prerequisite: Management 350.

Ethics of various issues in business, including social responsibility, environmental protection, privacy, individual rights, occupational safety and health, product liability, equality of opportunity, and the morality of capitalism.

357. Multinational Business and Comparative Management (3)

Prerequisite: Management 350.

Context of international business, environment, institutions, and business practices. Cultural awareness, sensitivity, interpersonal, and leadership skills needed in an international context.

401. Business Internship (3) Cr/NC I, II

Prerequisite: Consent of faculty adviser.

Internship with business firms, nonprofit organizations, or government agencies. Work done under joint supervision of intern organization and course instructor.

405. International Business Strategy and Integration (3) I, II

Prerequisites: Management 350, Finance 323, Information and Decision Systems 301 or 302, Marketing 370. **Proof of completion of prerequisites required:** Copy of transcript.

Integration of business administration principles and concepts for strategy design, implementation, and control in domestic, international, and global markets. Establishment of top management policy emphasized through case studies, experiential exercises, and simulations.

450. Venture Management (3) I, II

Prerequisites: Management 350, Finance 323, Information and Decision Systems 301 or 302, Marketing 370. **Proof of completion of prerequisites required:** Copy of transcript.

Process of initiating, expanding, purchasing, and consolidating businesses. Concepts, theories, and techniques of managerial innovation and implementation.

451. Organization Design and Change (3) I, II

Prerequisite: Management 350.

Management of organization design and development. Internal and external organizational factors such as environment, size, technology, power, politics, strategy, human resources, job design, and organization culture.

454. Interpersonal Processes (3) I, II, S

Prerequisite: Management 350.

Conceptual study and experiential training in interpersonal skills of management; acquisition of personal, managerial, and entrepreneurial behavioral competencies.

456. Conceptual Foundations of Business (3) I, II

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

Development and evolution of values and ideas characteristic of the business society: individualism, materialism, rationality, technology, and other major components of business ideology. Capitalism/socialism debate. Majors in the College of Business Administration may not use this course to satisfy requirements for General Education.

457. Applications in Management (1-3) I, II

Prerequisite: Consent of instructor.

Developing specific skills in areas of management. See Class Schedule for specific content.

458. Management Decision Games (1-3) II

Prerequisites: Consent of instructor. Management 350, Finance 323, Information and Decision Systems 301 or 302, Marketing 370.

Proof of completion of prerequisites required: Copy of transcript.

Integrated managerial decision making within a dynamic environment through the use of business games.

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.

498. Investigation and Report (1-3) I, II

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.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

UPPER DIVISION COURSE (Also Acceptable for Advanced Degrees)

596. Advanced Topics in Management (3)

Prerequisite: Six upper division units in management.

Advanced special topics in management. 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. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES Refer to Bulletin of the Graduate Division.

Marketing

In the College of Business Administration

OFFICE: Student Services 3356
TELEPHONE: (619) 594-5317

A Member of the AACSB—The International Association for Management Education.

Faculty

Emeritus: Akers, Apple, Barber, Darley, Haas, Hale, Lindgren, McFall, Settle, Vanier

Chair: Belch, G.

Professors: Belch, G., Belch, M., Krentler, Saghafi, Sciglimpaglia, Stampfl, Tyagi, Wotruba

Assistant Professor: Williams

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.

Teaching major in business for the single subject teaching credential.

Minor in marketing.

Admission to the Major

The undergraduate business administration program at San Diego State University is structured such that students desiring a business administration major are first admitted to the prebusiness administration major for their first two years of university work. During these first two years students should complete general education courses and a common core of nine lower division preparation for the business major courses – Accountancy 201, Financial Accounting Fundamentals; 202, Managerial Accounting Fundamentals; Finance 140, Legal Environment of Business; Economics 101, Principles of Economics (Macro); Economics 102, Principles of Economics (Micro); Information and Decision Systems 180, Principles of Information Systems; Information and Decision Systems 290, Business Communication (not required for accounting majors); Mathematics 120, Calculus for Business Analysis; and Statistics 119, Elementary Statistics for Business. These prerequisite courses may not be taken Cr/NC; the minimum grade in each class is C. All students must have fulfilled the SDSU Mathematics Competency and SDSU Writing Competency requirements and have completed 56 college units.

Supplemental admissions criteria must be met before students may declare an upper division major and be eligible for upper division courses. For current information concerning admissions criteria and procedures, contact the Business Undergraduate Program Office (BA 448).

Business administration majors may not complete a minor in the College of Business Administration.

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 is concerned that each individual upper division student makes reasonable academic progress toward earning a degree. To this end, the College will counsel students who have earned less than a “C” (2.0) average each semester. Further, such students will be warned that continued poor performance may result in their removal from any business major.

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—The International Association for Management Education accredited program. Exceptions require thorough documentation evidencing the above standards.

The Major

Marketing is defined as “the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods and services to create exchanges that satisfy individual and organizational objectives.” (American Marketing Association, 1986.)

The marketing major studies how products and services are developed, priced, promoted, distributed and sold. The process requires an understanding of buyer and seller behavior within the context of the overall market environment. Added emphasis is given to the important area of global markets with their own particular nuances.

Marketing is an essential part of every business. Not-for-profit organizations also have to market their products/services, and the marketing discipline addresses the special needs of such organizations.

The employment outlook for graduates in marketing continues to be very favorable in all areas, especially in sales for those who hold the bachelor’s degree. Some of the more common career opportunities for marketing graduates include:

Sales, which is the most common source of employment for recent marketing graduates. Sales people supervise retailing operation in large department stores, serve as sales representatives for manufacturers and wholesalers, and sell a variety of services and equipment.

Advertising and promotion specialists such as copywriters assemble information on products and services, study the characteristics of potential consumers, and prepare written materials to attract attention and stimulate interest among customers; advertising managers supervise the promotional activities of retailers, wholesalers, or manufacturers; account executives represent advertising agencies in negotiating contracts with clients for advertising services, offer advice in problem areas, and serve as troubleshooters in disputes between clients and the agency; media directors coordinate the purchasing of space in newspapers and magazines and arrange for commercials on radio and television; and production managers supervise the work of copywriters, artists, and other members of an advertising team.

Market research specialists collect, analyze, and interpret data to determine potential sales of a product or a service. They organize and supervise surveys, study the results by using statistical tests, and prepare reports with recommendations for management.

Product specialist/managers plan and coordinate the marketing functions specific to particular product(s)/brands.

Physical distribution specialists are responsible for the warehousing of products, the packing of shipments, and the delivery of orders to retailers or consumers.

Purchasing specialists, commonly known as buyers, acquire the materials and the services that are essential to the operation of a business or organization.

Marketing Major

**With the B.S. Degree in Business Administration
(Major Code: 05091)**

Preparation for the Major. Accountancy 201, 202; Economics 101, 102; Finance 140; Information and Decision Systems 180, 290; Mathematics 120 or 150; and Economics 201 or Statistics 119. (27-29 units)

These prerequisite courses may not be taken Cr/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.**

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. Forty-seven upper division units consisting of Marketing 370, 371, 470, 470L, 479; Finance 323; Information and Decision Systems 301, 302; Management 350; Business Administration 404 or Management 405; 16 units selected from Marketing 372, 373, 376, 377, 472, 473, 474, 476, 478. A "C" (2.0) average is required in the courses stipulated here for the major. Of the 128 units required for the degree, at least 60 units must be at the upper division level. This includes the 47 units listed above, nine units of upper division General Education, and at least four units of upper division electives, chosen from within or outside of Business Administration. A minimum of 64 units of coursework applicable to the bachelor's degree must be completed outside the areas of business administration, economics, and statistics. This means that at least six units of electives (upper or lower division) must be completed in areas other than business administration, economics, and statistics. A maximum of six lower division units of accountancy courses may be used to satisfy degree requirements.

Business Major

**In preparation for the Single Subject Teaching Credential
With the B.S. Degree in Business Administration**

All candidates for the single subject teaching credential in business must complete all requirements for the applicable specialization as outlined in this section of the catalog under Policy Studies or Teacher Education. Students must complete the requirements of a major in one of the five departments within the College of Business Administration. In consultation with the single subject credential adviser in the College of Business Administration, undergraduate students must develop programs which fulfill the State credential requirements. All undergraduate majors must demonstrate office skills proficiency. Finance 589 is required of all teaching credential majors. Of the 128 units required for the degree, at least 60 units must be at the upper division level.

Student programs must be approved in advance by the College of Business Administration single subject credential adviser.

Marketing Minor

The minor in marketing consists of a minimum of 20 units, of which 12 units must be in upper division courses, to include Marketing 370; Accountancy 201; Economics 102; and 11 to 13 units selected from

Information and Decision Systems 301, Marketing 371, 372, 373, 376, 377, 470 and 470L, 472 and 478, 473, 474, 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 with a major in the College of Business Administration or in International Business may not complete a minor in the College of Business Administration.

Students must officially declare the minor before taking any upper division business courses. **Students must meet the prerequisites for the minor in effect at the time that they declare the minor.** The current prerequisites for admission to the marketing minor include completion of the following courses with a grade of C or better: Economics 101, 102, and a three unit course in statistics (Statistics 119 is recommended); completion of the General Education requirements in Communication and Critical Thinking; completion of an additional nine units in the department of the student's major, including at least three units of upper division courses. Students must also meet the GPA requirement in effect at the time that they declare the minor. Contact the Business Undergraduate Program Office (BA 448) for admissions criteria and procedures.

Courses

UPPER DIVISION COURSES (Intended for Undergraduates)

370. Marketing (3) I, II

Prerequisite: Approved upper division business major, business minor, or another major approved by the College of Business Administration. **Proof of completion of prerequisite required:** Change of major form or other evidence of acceptable major code. Marketing majors must complete this course with a minimum grade of C (2.0).

Function of marketing in the organization and in society. Topics include market analysis and consumer behavior, product planning, pricing, promotion, distribution, and international marketing.

371. Consumer and Buyer Behavior (4) I, II

Prerequisite: Marketing 370 with a minimum grade of C (2.0). **Proof of completion of prerequisite required:** Copy of transcript.

Personal, social, and cultural factors that distinguish identifiable market segments and influence buyers' and consumers' responses to marketing programs.

372. Retail Marketing Methods (4) I, II

Prerequisite: Marketing 370 with a minimum grade of C (2.0) **Proof of completion of prerequisite required:** Copy of transcript.

Retail store and direct retail marketing organization, site location, personnel, promotion, purchasing, merchandising, inventory, and control methods.

373. Marketing Communication and Promotion (4)

Prerequisite: Marketing 370 with a minimum grade of C (2.0). **Proof of completion of prerequisite required:** Copy of transcript.

Communication and promotion theory; advertising, personal selling, media strategy and tactics, public relations, and publicity strategy, methods, measurement, and ethics.

376. Global Marketing Strategy (4) I, II

Prerequisite: Marketing 370 with a minimum grade of C (2.0). **Proof of completion of prerequisite required:** Copy of transcript.

International marketing and trade principles; comparative economic and sociocultural systems; entry, counter-trading, transfer pricing, and promotion.

377. Selling Strategy and Practices (4) I, II

Prerequisite: Marketing 370 with a minimum grade of C (2.0). **Proof of completion of prerequisite required:** Copy of transcript.

Selling strategy and practices as an integral part of the total marketing system, including territory management, consultative selling, negotiation, and system selling.

470. Marketing Research (4) I, II

Prerequisites: Completion of lower division courses in the major or minor. A minimum grade of C (2.0) in Information and Decision Systems 301 and Marketing 370. **Proof of completion of prerequisites required:** Copy of transcript. Concurrent registration in Marketing 470L.

Methods of information generation and interpretation for marketing decisions; research design, data sources and collection, analysis and reporting techniques.

470L. Marketing Research Laboratory (1) Cr/NC

Two hours of laboratory.

Prerequisites: Completion of lower division courses in the major or minor. A minimum grade of C (2.0) in Information and Decision Systems 301 and Marketing 370. **Proof of completion of prerequisites required:** Copy of transcript. Concurrent registration in Marketing 470.

Computer practicum. Use of SPSS computer programs for analysis of marketing research survey and experimental data.

472. Advertising and Promotion Management (3)

Prerequisites: Marketing 371 and 373; concurrent registration in Marketing 478. **Proof of completion of prerequisites required:** Copy of transcript.

Management of the advertising and promotion functions. Promotional planning, implementation, and evaluation.

473. Sales Management (4) I, II

Prerequisite: Marketing 370 with a minimum grade of C (2.0). **Proof of completion of prerequisite required:** Copy of transcript.

Sales force organization, recruitment, selection, training, compensation, evaluation, and control; sales analysis, costs, budgets, and quotas; coordination with personal selling.

474. Business Marketing (4) I, II

Prerequisite: Marketing 370 with a minimum grade of C (2.0). **Proof of completion of prerequisite required:** Copy of transcript.

Marketing practices and strategy designed for organizational customers; focuses on purchasing practices of organizational customers and development of marketing mixes for private, commercial, institutional, and governmental markets, both domestic and global.

476. Marketing, Computers, and the Internet (4) I, II

Prerequisite: Marketing 370 with a minimum grade of C (2.0). **Proof of completion of prerequisite required:** Copy of transcript.

Applications of personal computers, information technology, and Internet in business and marketing. Topics include use of computerized reference sources, the world wide web, webpage design, marketing and business on the internet, desktop publishing and computer databases.

478. Advertising and Promotion Management Project (1)

Two hours of activity.

Prerequisite: Concurrent registration in Marketing 472. **Proof of completion of prerequisite required:** Copy of transcript.

Advertising and sales promotion program development project; initial design, pretesting, implementation, and program evaluation.

479. Strategic Marketing Management (4) I, II

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.

Strategic planning, integration, management, and control of the marketing functions and mix; applying decision techniques for marketing problem solution.

496. Selected Topics in Marketing (1-4) I, II

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.

498. Investigation and Report (1-3) I, II

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.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

GRADUATE COURSES
Refer to Bulletin of the Graduate Division.

Mathematics

In the College of Sciences

OFFICE: Business Administration/Mathematics 203

TELEPHONE: (619) 594-6191

Faculty

Emeritus: Bell, Branstetter, Bray, Burdick, Deaton, Drobnies, Eagle, Eisemann, Fountain, Garrison, Gindler, Harvey, Ho, Holmes, Howard, Macky, Marcus, Marosz, Moser, Nower, Riggs, Romano, Saltz, Smith, Van de Wetering, Villone, Willerding

Chair: Elwin

Professors: Anantha, Baase-Mayers, Beck, Branca, Carlson, Carroll, Donald, Dunster, Elwin, Geveci, Golbeck, Grone, Hager, Hui, Lesley, Lui, Lutz, Mahaffy, Marovac, McLeod, Park, Pierce, Ross, Salamon, Short, Sowder, J., Sowder, L., Swiniarski, Tarokh, Thompson, Vuskovic

Associate Professors: Castillo, Eckberg, Hintzman, Kelly, Kirschvink, Lopez, Springer, Steffey, Stewart, Vinge, Whitman, Whitney

Assistant Professors: Bowers, King, Lobato

Offered by the Department of Mathematical and Computer Sciences

Master of Arts degree in mathematics.

Master of Science degree in applied mathematics.

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 mathematical finance.

Emphasis in science.

Teaching major in mathematics for the single subject teaching credential.

Minor in mathematics.

Certificate in introductory mathematics.

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 Mathematical and Computer Sciences 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.

Majors will have a faculty member assigned as an adviser/mentor. The faculty member will be available to offer academic advice and assist the student in major course selection.

Mathematics Major

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 17011)

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 courses can apply to the degree.

A minor is not required with this major.

Preparation for the Major. Mathematics 150 and 151; and 245, 252, 254. (19 units)

Recommended: Physics 195, 195L, 196, 196L, 197, 197L.

Foreign Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language as part of the preparation for the major. Refer to the section of this catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 27 upper division units, selected with approval of the departmental adviser before starting upper division work, including Mathematics 337, 521A, 524, 534A, and one two-semester sequence selected from: Mathematics 521A-521B, 521A and Computer Science 562; Mathematics 337 and 531; 534A-534B; 534A and 535; 541 and 542; 541 and 543; Computer Science 310 and 320 or 520; Statistics 550 and 553, Statistics 551A and 551B; and nine units of electives. Student must complete an outline for the major and file a copy signed by the adviser with the Office of Admissions and Records.

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.

A minor is not required with this major.

Emphasis in Applied Mathematics

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.

Preparation for the Major. Mathematics 150, 151, 245, 252, 254, Computer Science 107, 108, Statistics 250. (28 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units to include Mathematics 337, 521A, 524, 532, 534A, 534B, 541; Statistics 350A or 551A; and 12 units of electives in computer science, mathematics, or statistics (approved by the Applied Mathematics adviser) excluding Mathematics 302, 303, 312, 313, 342A, 342B, 414, 509, and Statistics 357. Student must complete outline for major and file a copy signed by adviser with the Office of Admissions and Records.

Auxiliary Area. A minimum of 12 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, 307, 341. 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 12 unit requirement is minimal, and a minor in an approved field is highly recommended.

Emphasis in Computational Science

Preparation for the Major. Mathematics 150, 151, 245, 252, 254, Computer Science 107, 108, 205, Statistics 250. (31 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units in mathematics to include Mathematics 336, 337, 521A, 524, 534A; at least nine units from Mathematics 532, 536, 537, 541, 542, 543, Computer Science 558, 575; three units of Mathematics 499 (Senior Project); and nine units of electives from computer science, mathematics, or statistics (approved by the Applied Mathematics adviser) excluding Mathematics 302, 303, 312, 313, 342A, 342B, 414, 509, and Statistics 357. Student must complete outline for major and file a copy signed by adviser with the Office of Admissions and Records.

Emphasis in Mathematical Finance

This emphasis is designed to train students for work in the field of financial mathematics, focusing on derivative instruments and risk management. The graduate would also be highly qualified for graduate study.

Preparation for the Major. Mathematics 150, 151, 245, 252, 254, Computer Science 107, 108, Statistics 119 or 250, Accountancy 201, Economics 101, 102. (37 units) The student must complete these courses before being allowed to register for the upper division finance courses.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 39 upper division units to include Mathematics 337, 524, 534A, 534B or 562, 531, 544, 580, 581, Statistics 550, Finance 323, 326 or Economics 490, Finance 327, 329 or 421. Student must complete outline for major and file a copy signed by adviser with the Office of Admissions and Records.

Emphasis in Science

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.

Preparation for the Major. Mathematics 150, 151, 245, 252, 254, Computer Science 107, Statistics 250. (25 units) Some lower division courses will probably be prerequisite to science courses applied to the major.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units to include Mathematics 337, 524, 534A, 534B; at least six units selected from Mathematics 521A, 531, 532, 536, 537; 12 units from a science to which mathematics may be applied (these should be from a single science and must be approved by the B.S. adviser); and six units of electives in computer science, mathematics, or statistics excluding Mathematics 302, 303,

312, 313, 342A, 342B, 414, 509, and Statistics 357. Student must complete outline for major and file a copy signed by adviser with the Office of Admissions and Records.

Mathematics Major

In preparation for the Single Subject Teaching Credential With the B.A. Degree in Liberal Arts and Sciences (Major Code: 17011)

All candidates for a teaching credential must complete all requirements as outlined in this section of the catalog under Policy Studies or Teacher Education. For students completing the single subject teaching credential program, no more than 48 units in mathematics courses can apply to the degree.

This major may be used by students in teacher education as an undergraduate major for the B.A. degree in liberal arts and sciences.

Preparation for the Major. Mathematics 150 and 151; and 245, 252, 254, Computer Science 107 or 205. (22 units)

Recommended: Physics 195, 195L, 196, 196L, 197, 197L. (12 units)

Foreign 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."

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 24 upper division units in mathematics to include Mathematics 302, 414, 521A, 534A, Statistics 357; an upper division course in geometry; and six units of electives in mathematics approved by the credential adviser. Student must complete outline for major and file a copy signed by adviser with the Office of Admissions and Records.

Single Subject Waiver Program in Mathematics

Students who wish to satisfy the requirements for the subject matter program in mathematics to prepare for a single subject teaching credential program in mathematics must complete the following requirements. (Students who have completed one or more courses in the program before January 1, 1995, should see the adviser since the earlier program is slightly different.)

To be admitted to the program, students must demonstrate competency in high school mathematics (algebra through trigonometry) by passing a mathematics placement test.

Subject Matter Waiver Program. A minimum of 45-46 units to include Mathematics 150, 151, 245, 252, 254, 302, 414, 521A, 534A, Statistics 357; one course selected from Mathematics 510, 511, 512; Computer Science 107 or 205; and six units of upper division electives selected with the approval of the adviser from physical and mathematical sciences. Students may substitute equivalent courses taken at this or other universities only with the approval of the single subject credential adviser. An approved calculus sequence of 12 units may be substituted for the 13-unit calculus sequence (Mathematics 150, 151, 252), thus reducing the total unit requirement from 46 to 45.

Mathematics Minor

The minor in mathematics consists of a minimum of 20-22 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.

Introductory Mathematics Certificate

The purpose of the Introductory Mathematics Certificate program is to provide individuals with appropriate mathematics coursework to qualify them to receive a supplementary authorization in introductory mathematics from the Commission on Teacher Credentialing. 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 Entry-Level Mathematics Examination. In order to enroll in the program, individuals should contact the supplementary mathematics credential adviser in the Department of Mathematical and Computer Sciences.

The program consists of 20 units to include Mathematics 140, 150, 302, 312 (with departmental credential adviser permission), 313, and Statistics 357.

Individuals must complete at least six 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.

With the approval of the department, a student may apply no more than three units of coursework from the certificate program toward a major. Courses in the certificate may not be counted toward the minor.

Single Subject Mathematics Certificate

The purpose of the Single Subject Mathematics Certificate program is to provide individuals with appropriate mathematics coursework to qualify them to receive a credential in single subject mathematics. 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 Entry-Level Mathematics Examination. In order to enroll in the program, individuals should contact the single subject mathematics credential adviser in the Department of Mathematical and Computer Sciences.

The program consists of 46 units to include Computer Science 107, Mathematics 150 and 151; and 245, 252, 254, 302, 414, 510, 521A, 534A, Statistics 357, and six 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 106, 107, 108, Mathematics 104, 118, 120, 121, 140, 150, 210, 211, 312, Statistics 119, 250 must satisfy the Entry-Level Mathematics Examination requirement and 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

(Intermediate algebra is prerequisite to all mathematics courses.)

LOWER DIVISION COURSES

NOTE: Proof of completion of Entry-Level Mathematics requirement required for Mathematics 104, 118, 120, 121, 122, 140, 150, 210, 211; Copy of ELM score or verification of exemption.

104. Trigonometry (2) I, II (CAN MATH 8)

Prerequisites: Satisfaction of the Entry-Level Mathematics requirement and qualification on the Mathematics Departmental Placement Examination, Part IA.

Basic concepts of analytic trigonometry.

118. Topics in Mathematics (3) (CAN MATH 2)

Prerequisites: Satisfaction of the Entry-Level Mathematics requirement and qualification on the Mathematics Departmental Placement Examination, Part IA.

Topics selected from algebra, analysis, geometry, logic, probability, or statistics, designed to give student insight into structure of mathematical theories and their applications. Not open to students with credit in Mathematics 140 or higher numbered courses.

120. Calculus for Business Analysis (3) I, II, S (CAN MATH 34)

Prerequisites: Satisfaction of the Entry-Level Mathematics requirement and qualification on the Mathematics Departmental Placement Examination, Part IA.

Matrix algebra. Calculus including differentiation and integration. Graphing and optimization. Exponential and logarithmic functions. Multivariable calculus.

121. Calculus for the Life Sciences I (3) I, II (CAN MATH 30)

Prerequisites: Satisfaction of the Entry-Level Mathematics requirement and qualification on the Mathematics Departmental Placement Examination, Part IA.

Basic concepts of differential calculus with life science applications. Not intended for physical science or engineering majors. Not open to students with credit in Mathematics 150.

122. Calculus for the Life Sciences II (3) I, II

Prerequisites: Satisfaction of the Entry-Level Mathematics requirement; qualification on the Mathematics Departmental Placement Examination, Part IA; and Mathematics 121.

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.

140. College Algebra (3) I, II, S

Prerequisites: Satisfaction of the Entry-Level Mathematics requirement and qualification on the Mathematics Departmental Placement Examination, Part IA.

Functional notation, mathematical induction, complex numbers, DeMoivre's theorem, inequalities, binomial theorem, determinants, etc. Not open to students with credit in Mathematics 150.

150. Calculus I (5) I, II, S (CAN MATH 18)

(150 + 151: CAN MATH SEQ B)

(150 + 151 + 252: CAN MATH SEQ C)

Prerequisites: Knowledge of algebra, geometry, and trigonometry as demonstrated by either (1) satisfactory completion of Mathematics 104 and 140 at SDSU with grades of C or better; or (2) satisfaction of the Entry-Level Mathematics requirement and qualification on the Mathematics Departmental Placement Examination, Part P for Mathematics 140 and Part III for Mathematics 104. Appropriate combinations of (1) and (2) are also acceptable.

Algebraic and transcendental functions. Continuity and limits. The derivative and its applications. The integral.

151. Calculus II (4) I, II, S (CAN MATH 20)

(150 + 151: CAN MATH SEQ B)

(150 + 151 + 252: CAN MATH SEQ C)

Prerequisite: Mathematics 150 with minimum grade of C.

Techniques and applications of integration. Improper integrals. Differential equations. Infinite series. Conic sections. Curves in parametric form, polar coordinates.

210. Structure and Concepts of Elementary Mathematics I (3) I, II

This course or its equivalent is required for students working toward a multiple subject credential in elementary education.

Prerequisites: Satisfaction of the Entry-Level Mathematics requirement and qualification on the Mathematics Departmental Placement Examination, Part C.

Number sense and operation concepts; estimation, mental arithmetic, and algorithms; geometric concepts; linear measurements; problem solving strategies.

211. Structure and Concepts of Elementary Mathematics II (3) I, II

Prerequisites: Satisfaction of the Entry-Level Mathematics requirement and qualification on the Mathematics Departmental Placement Examination, Part C; and Mathematics 210.

Patterns and functions; rational and real numbers; proportional reasoning; geometric relationships; continuation of measurement topics; problem solving strategies.

245. Discrete Mathematics (3) I, II, S

Prerequisite: Mathematics 122 or 151.

Logic, methods of proof, set theory, number theory, equivalence and order relations, counting (combinations and permutations), solving recurrence relations.

252. Calculus III (4) I, II, S (CAN MATH 22) (150 + 151 + 252: CAN MATH SEQ C)

Prerequisite: Mathematics 151 with minimum grade of C.

Functions of several variables. Vectors. Partial derivatives and multiple integrals. Line integrals and Green's Theorem.

254. Introduction to Linear Algebra (3) I, II, S

Prerequisite: Mathematics 151.

Matrix algebra, Gaussian elimination, determinants, vector spaces, linear transformations, orthogonality, eigenvalues, and eigenvectors.

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.

299. Special Study (1-3)

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

UPPER DIVISION COURSES (Intended for Undergraduates)

NOTE: Proof of completion of prerequisites required for all upper division courses: Copy of transcript.

302. Transition to Higher Mathematics (3) I, II

Prerequisite: Mathematics 150.

Selected topics in mathematics to emphasize proof writing and problem solving. Intended for those planning to teach secondary school mathematics.

303. History of Mathematics (3) I, II

Prerequisites: Mathematics 104 and 140, or students using course to satisfy General Education must complete the General Education requirement in Foundations IIA., Natural Sciences and Quantitative Reasoning.

Major currents in the development of mathematics from ancient Egypt and Babylon to late nineteenth century Europe.

312. Modern Elementary Mathematics I (3) I, II

Prerequisites: Mathematics 211 and satisfactory performance on Mathematics Departmental Placement Examination, Part LS.

Topics in mathematics, selected from algebra, geometry, number theory, probability, statistics, logic, and mathematical systems; problem solving. Enrollment limited to future teachers in grades K-8.

313. Modern Elementary Mathematics II (3)

Prerequisite: Mathematics 312.

Continuation of Mathematics 312. Enrollment limited to future teachers in grades K-8.

336. Introduction to Mathematical Modeling (3) I

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.

337. Elementary Differential Equations (3) I, II

Prerequisite: Mathematics 151.

Integration of first-order differential equations, initial and boundary value problems for second-order equations, series solutions and transform methods, regular singularities.

342A. Methods of Applied Mathematics I (3) I, II

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.

342B. Methods of Applied Mathematics II (3) I, II

Prerequisite: Mathematics 342A.

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.

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.

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.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

UPPER DIVISION COURSES (Also Acceptable for Advanced Degrees)

NOTE: Proof of completion of prerequisites required for all upper division courses: Copy of transcript.

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.

510. Introduction to the Foundations of Geometry (3) I, II

Prerequisite: Mathematics 122 or 151.

The foundations of Euclidean and hyperbolic geometries. Highly recommended for all prospective teachers of high school geometry.

511. Projective Geometry (3)

Prerequisite: Mathematics 254.

Geometry emphasizing relationships between points, lines, and conics. Euclidean geometry and some non-Euclidean geometries as special cases of projective geometry.

512. Non-Euclidean Geometry (3)

Prerequisite: Mathematics 122 or 151.

History of attempts to prove the fifth postulate; emphasis on plane synthetic hyperbolic geometry; brief treatment of other types of non-Euclidean geometry.

521A. Abstract Algebra (3) I, II

Prerequisites: Mathematics 245 and 252.

Abstract algebra, including elementary number theory, groups, and rings.

521B. Abstract Algebra (3) II

Prerequisite: Mathematics 521A.

Continuation of Mathematics 521A. Rings, ideals, quotient rings, unique factorization, noncommutative rings, fields, quotient fields, and algebraic extensions.

522. Number Theory (3) I

Prerequisites: Mathematics 245 and 252.

Theory of numbers to include congruences, Diophantine equations, and a study of prime numbers; cryptography.

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.

524. Linear Algebra (3) I, II

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.

525. Algebraic Coding Theory (3) II

Prerequisite: Mathematics 254.

Linear codes, perfect and related codes, cyclic linear codes, BCH codes, burst error-correcting codes.

531. Partial Differential Equations (3) I

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.

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.

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.

534A. Advanced Calculus I (3) I, II, S

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.

534B. Advanced Calculus II (3) II

Prerequisite: Mathematics 534A.

Series and sequences of functions and their applications, functions of several variables and their continuity, differentiability and integrability properties.

535. Introduction to Topology (3) I

Prerequisite: Mathematics 534A.

Topological spaces. Functions, mappings, and homeomorphisms. Connectivity, compactness. Metric spaces.

536. Mathematical Modeling (3) I

Prerequisites: Mathematics 254 and 337 or Mathematics 342A and 342B or Engineering 280.

Advanced models from the physical, natural, and social sciences. Emphasis on classes of models and corresponding mathematical structures. (Formerly numbered Mathematics 636.)

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.

541. Introduction to Numerical Analysis and Computing (3) I, II, S

Prerequisites: Mathematics 254 or 342A; and Computer Science 106 or 107 or 205 or Engineering 120.

Solution of equations of one variable, direct methods in numerical linear algebra, least squares approximation, interpolation and uniform approximation, quadrature.

542. Introduction to Numerical Solutions of Differential Equations (3) II

Prerequisites: Mathematics 337 and 541.

Initial and boundary value problems for ordinary differential equations. Partial differential equations. Iterative methods, finite difference methods, and the method of lines.

543. Numerical Matrix Analysis (3)

Prerequisite: Mathematics 541.

Gaussian elimination, LU factorizations and pivoting strategies. Direct and iterative methods for linear systems. Iterative methods for diagonalization and eigensystem computation. Tridiagonal, Hessenberg, and Householder matrices. The QR algorithm.

544. Computational Finance (3)

Prerequisites: Mathematics 531 and Statistics 550.

Numerical procedures for evaluating financial derivatives. Discretization of partial differential equations. Monte Carlo simulation techniques.

561. Applied Graph Theory (3)

Prerequisite: Mathematics 245 or 254.

Undirected and directed graphs, trees, Hamiltonian circuits, classical problems of graph theory including applications to linear systems.

562. Mathematical Methods of Operations Research (3) II

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. Not open to students with credit in Mathematics 362.

579. Combinatorics (3)

Prerequisite: Mathematics 245.

Permutations, combinations, generating functions, recurrence relations, inclusion-exclusion counting. Polya's theory of counting, other topics and applications.

580. Pricing and Risk Management of Derivative Securities A (3)

Prerequisite: Mathematics 544.

Theory of derivative securities with focus on stock-index and FX-options.

581. Pricing and Risk Management of Derivative Securities B (3)

Prerequisite: Mathematics 580.

Theory of derivative securities with focus on fixed income instruments.

596. Advanced Topics in Mathematics (1-4) I, II

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. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

Mechanical Engineering

In the College of Engineering

OFFICE: Engineering 323M
TELEPHONE: (619) 594-6067

The undergraduate program in Mechanical Engineering is accredited by the Accreditation Board for Engineering and Technology, Inc.

Faculty

Emeritus: Bauer, Bedore, Bilterman, Fitz, Hoyt, Lybarger, Mansfield, Morgan, Murphy, Ohnysty, Rao, Stone
Chair: Kline
Professors: Craig, Güven, Hussain, Kline, Pinto
Associate Professors: Bailey, Bhattacharjee, Thompson
Assistant Professors: Burns, May-Newman, Olevsky

Offered by the Department

Doctor of Philosophy degree in applied mechanics.
Master of Science degree in mechanical engineering.
Major in mechanical 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 Accreditation Board for Engineering and Technology, Inc., 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 twelve units may be used for General Education credit from any one department or academic unit.

I. Communication and Critical Thinking: 9 units

1. Oral Communication (3 units)
2. Composition (3 units)
3. Intermediate Composition and Critical Thinking (3 units)

II. Foundations: 29 units

- A. Natural Sciences and Quantitative Reasoning (17 units):
1. Physical Sciences (11 units)
Engineering students will take Chemistry 200 which includes a laboratory (5 units).
Physics 195 (3 units)
Physics 196 (3 units)
 2. Life Sciences (3 units)
 3. Laboratory (satisfied under A.1. above)
 4. Mathematics/Quantitative Reasoning
Engineering students will take Mathematics 150, 3 units applicable to General Education.
- 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 in General Education, excluding courses numbered 500 and above.

IV. Explorations: 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.
- B. Upper division Humanities (3 units from a department not selected in A above.)
- C. Upper division Social and Behavioral Sciences (3 units)

The Major

Mechanical engineers invent solutions to problems involving a broad spectrum of mechanical/electromechanical devices. They create new devices for solving problems in new and different ways. A newer focus for mechanical engineers is in the area of biomedical engineering, which is the application of quantitative engineering methods to the understanding and solution of biological and physiological problems. Another focus is the design of manufacturing systems. This involves improving quality and speed of manufacture through implementation of computer technology via robots and other automation equipment. Thus, Computer Aided Design (CAD), Computer Aided Manufacturing (CAM), and Computer Integrated Manufacturing (CIM) are all newer aspects of mechanical engineering education.

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 heavily involved in finding solutions for these problems.

Mechanical Engineering Major

With the B.S. Degree (Major Code: 09101)

NOTE: See following page for recommended sequence of courses for the major in mechanical engineering.

All students in mechanical engineering pursue a common program of basic sciences, engineering, and mechanical engineering fundamentals. The major consists of 50 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 below 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. *The students' choice of elective courses must be made in consultation with their adviser and documented by the filing of an approved master plan during the second semester of their freshman year.*

FRESHMAN YEAR

<i>Fall Semester</i>	<i>Units</i>	<i>Spring Semester</i>	<i>Units</i>
Chem. 200, General Chemistry.....	5	Math. 151, Calculus II.....	4
Engr. 120, Engr. Problem Analysis.....	2	ME 195, Graphics and Processes	3
Math. 150, Calculus I	5	Phys. 195, Principles of Physics	3
General Education	6	General Education	6
	<hr/> 18		<hr/> 16

SOPHOMORE YEAR

<i>Fall Semester</i>	<i>Units</i>	<i>Spring Semester</i>	<i>Units</i>
Math. 252, Calculus III	4	Phys. 197, Principles of Physics	3
EM 200, Statics	3	EE 203, Principles of Elect. Engr.	3
ME 260, Intro. to Engineering Materials ..	3	EM 220, Dynamics	3
Phys. 196, Principles of Physics	3	Engr. 280, Methods of Analysis	3
General Education	6	ME 275, Elem. of Therm. & Mech. Sys. ..	3
	<hr/> 19	General Education	3
			<hr/> 18

JUNIOR YEAR

<i>Fall Semester</i>	<i>Units</i>	<i>Spring Semester</i>	<i>Units</i>
CEE 301, Intro. to Solid Mechanics	3	EE 303, Electronics, Instrum., and Electrical Energy Conversion	3
ME 310, Engr. Design: Introduction	3	EM 340, Fluid Mechanics	3
ME 340, Materials and Design.....	3	ME 314, Engr. Design: Mech. Comp. ...	3
ME 350, Thermodynamics	3	ME 395, Engr. Systems Laboratory	2
ME 390, Engr. Systems Laboratory	2	ME 450, Engr. Thermodynamics	3
General Education	3	General Education	3
	<hr/> 17		<hr/> 17

SENIOR YEAR

<i>Fall Semester</i>	<i>Units</i>	<i>Spring Semester</i>	<i>Units</i>
ME 470, Principles of Heat Transfer	3	ME 490B, Engr. Design: Project	2
ME 490A, Engr. Design: Project	2	ME 510, Adv. Machine Design	3
ME 512, Simulation of Engr. Sys.	3	#Professional Electives	6
#Professional Electives	3	General Education	3
General Education	3	American Institutions	3
American Institutions	3		
	<hr/> 17		<hr/> 17

Approved as part of the student's master plan.

All mechanical engineering students are required to file a master plan. The purpose of the plan is to facilitate proper academic advice. The plan is to be filed after consultation with a faculty member of the department. Once filed, the plan must be reviewed each semester with the assigned adviser before advanced registration. Filing the master plan will normally occur in Mechanical Engineering 195. Transfer students must comply with this requirement prior to enrollment in Mechanical Engineering 310.

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.

Upper Division Writing Requirement. This requirement can be satisfied by passing the departmental screening examination, a part of Mechanical Engineering 310, or passing the University Writing Examination, or completing one of the approved writing courses with a grade of C (2.0) or better.

Courses

LOWER DIVISION COURSES

190. Engineering Drawing (2) I, II (CAN ENGR 2)

Six hours of laboratory.

Development of drawing skills and techniques for engineers. Elementary orthographic and pictorial drawing, sections, dimensioning. Instrument and freehand drawing. Drawing as an aid to visualization and design.

195. Engineering Design: Graphics and Processes (3) I, II

One lecture and six hours of laboratory.

Prerequisite: One year of high school drafting or Mechanical Engineering 190. **Proof of completion of prerequisite required:** High school grade records or copy of transcript.

Graphic communication for engineers. Presentation and interpretation of engineering drawings using software such as AUTOCAD or CADKEY. Introduction to manufacturing processes and safety. Hands-on manufacturing projects to provide understanding of influence of manufacturing processes on design decisions.

260. Introduction to Engineering Materials (3) I, II (CAN ENGR 4)

Prerequisites: Chemistry 200 and credit or concurrent registration in Engineering Mechanics 200. **Proof of completion of prerequisites required:** Copy of transcript and evidence of concurrent registration in Engineering Mechanics 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.

275. Elements of Thermal and Mechanical Systems (3)

Prerequisites: Chemistry 200, Engineering 120, Mathematics 151 (with minimum grade of C), and Physics 195. **Proof of completion of prerequisites required:** Copy of transcript.

Fundamental principles of thermal science and mechanical design; concepts of engineering systems and subsystems; problem-solving techniques. Steam tables, ideal gas law, and first law of thermodynamics. Engineering ethics and case studies from engineering practice.

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 390, 450, 490A, and 530 require evidence of concurrent registration in appropriate courses.

310. Engineering Design: Introduction (3) I, II

Two lectures and three hours of guided design activities.

Prerequisites: Mechanical Engineering majors—Rhetoric and Writing Studies 200 or Linguistics 200 with a grade of C or better, Engineering 120, Mechanical Engineering 195, 275, and Engineering Mechanics 220. To be eligible for the departmental upper division writing test in this class, students must have completed 60 units, fulfilled the Writing Competency requirement, and completed the General Education requirement in Written Communication. 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.

314. Engineering Design: Mechanical Components (3) I, II

Prerequisites: Mechanical Engineering 310 and Civil and Environmental Engineering 301.

Application of mechanics, physical properties of materials, and solid mechanics to the design of machine elements. Student design projects.

340. Materials and Design (3) I, II

Prerequisite: Mechanical Engineering 260.

Fabrication and thermomechanical processing effects on properties and service behavior of engineering materials. Fracture mechanics and materials behavior under a range of design conditions. Design criteria for engineering materials including fatigue and creep. Case studies and failure analysis techniques.

350. Thermodynamics (3) I, II

Prerequisites: Mathematics 252 and Engineering Mechanics 200, both with a grade of C or better, and Mechanical Engineering 275.

Thermodynamic laws are fully developed and analyzed. Emphasis on second law analysis, utilization of computer software such as EES for steam and gas tables in problem solving. Introduction to thermodynamic cycles.

352. Thermodynamics and Heat Transfer (3) I, II

Prerequisites: Mathematics 252 with a grade of C or better, and Engineering Mechanics 202 or 220.

First and second laws of thermodynamics; heat conduction, convection and radiation. Not acceptable for mechanical engineering majors.

390. Engineering Systems Laboratory (2) I, II

One lecture and three hours of laboratory.

Prerequisites: Rhetoric and Writing Studies 200 or Linguistics 200, Electrical Engineering 203, Engineering 280, all with a grade of C or better; and credit or concurrent registration in Civil and Environmental Engineering 301.

Engineering experimentation. Instrumentation theory, data analysis, technical communication and experiment design. Principles taught in lecture and applied experiments selected from subdisciplines of mechanical engineering. Focus includes vibration measurement analysis, electronics and digital Programmable Logic Control (PLC).

395. Engineering Systems Laboratory (2) I, II

One lecture and three hours of laboratory.

Prerequisites: Mechanical Engineering 350 and 390.

Advanced experiment design, data acquisition theory and data analysis. Experience in designing, conducting and reporting on experiments to acquire knowledge about engineering systems. Projects include heat transfer and experiments in thermodynamics, material testing and heat treatment.

450. Engineering Thermodynamics (3) I, II

Prerequisites: Mechanical Engineering 350 and credit or concurrent registration in Engineering Mechanics 340.

Further development of concepts from classical thermodynamics. Analysis and design of thermodynamics and gas dynamic cycles and other applications of energy conversion. Emphasis on advanced energy systems and problem solving using computers.

470. Principles of Heat Transfer (3) I, II

Prerequisites: Engineering 280 with a grade of C or better, Engineering Mechanics 340, and Mechanical Engineering 350.

Heat transfer by conduction, convection, radiation, and combinations thereof. Introduction to heat exchanger analysis and design, along with other applications. Computer-assisted problem solving techniques.

490A-490B. Engineering Design: Senior Project (2-2) I, II

Six hours of guided design activities.

Prerequisites for 490A: Mechanical Engineering 314, 395, and credit or concurrent registration in Mechanical Engineering 470, 512, and Electrical Engineering 303.

Prerequisites for 490B: Mechanical Engineering 450, 490A.

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.

496. Advanced Mechanical Engineering Topics (1-3) I, II

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 six units for any combination of Mechanical Engineering 496, 499 and 596.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor. **Proof of completion of prerequisite required:** Copy of transcript.

Individual study. Maximum credit six 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. In addition, Mechanical Engineering 390, 450, 490A, and 530 require evidence of concurrent registration in appropriate courses.

510. Advanced Machine Design (3) I, II

Prerequisites: Mechanical Engineering 314 and 340.

Application of advanced mechanics of materials to the design and analysis of mechanical elements. Introduction to probabilistic design and to finite element methods and applications. Design projects involve extensive use of finite element programs.

512. Simulation of Engineering Systems (3) I, II

Two lectures and three hours of laboratory.

Prerequisites: Mechanical Engineering 314 and 395.

Modeling, simulation, analysis, and design of mechanical engineering dynamics, vibration, electromechanical systems, heat transfer, thermodynamics and control systems. Introduction to virtual instrumentation using software such as LABVIEW.

520. Introduction to Mechanical Vibrations (3)

Prerequisites: Mechanical Engineering 512 and Civil and Environmental Engineering 301.

Analysis of mechanical vibration; single- and multi-degree of freedom systems; free and forced vibrations; vibration isolation; vibration absorbers. Theory of vibration measuring instruments.

530. Automatic Control Systems (3)

Prerequisites: Engineering 280 with a grade of C or better, and credit or concurrent registration in Mechanical Engineering 512.

Analysis of the dynamic characteristics of control components and systems. Stability and response of closed loop systems. Design of control systems.

540. Nonmetallic Materials (3)

Prerequisites: Mechanical Engineering 314 and 340.

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.

542. Manufacturing with Non-Metallic Materials (3)

Prerequisites: Mechanical Engineering 340 and Engineering 280 with a grade of C or better.

Engineering polymers and composites, processes, and manufacturing techniques. Polymer flow in extrusion, compression molding, RTM, and calendaring. Hands-on fabrication and test exercises included along with a capstone manufacturing project.

544. Advanced Manufacturing Processes (3)

Prerequisites: Mechanical Engineering 195, 314, 340, 350; and Engineering 280 with a grade of C or better.

Technical and business aspects of contemporary and emerging manufacturing. Emphasis on ethical and sustainable engineering in a global business setting. Includes TQM, SPC, cost modeling and ergonomics. Net-shape and non-net-shape manufacturing and mechanics.

546. Computer Aided Manufacturing (3)

Prerequisites: Mechanical Engineering 195, 314, 340; Engineering 120 and 280, both with a grade of C or better.

Computer controlled manufacturing and assembly techniques and devices. Databases and special languages. Agile manufacturing software programs and technologies.

570. Thermal Systems Analysis and Design (3)

Prerequisite: Mechanical Engineering 470.

Analysis, design, and optimization of thermal systems using micro-computers. 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.

580. Elements of Energy Conversion (3)

Prerequisite: Mechanical Engineering 350.

Principles of physics and chemistry applied to design and performance analysis of a broad spectrum of direct and alternative energy systems. Solar photovoltaics, passive and active solar energy conversion, thermoelectrics, thermionics, magnetohydrodynamics, nuclear fusion, wind and wave energy, and fuel cells.

582. Heating, Ventilating, and Air-Conditioning (3)

Prerequisite: Mechanical Engineering 470.

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.

586. Solar Energy Conversion (3)

Prerequisites: Engineering Mechanics 340, Mechanical Engineering 450 and 470.

Application of thermodynamics, fluid mechanics and heat transfer to the thermal design of solar energy conversion systems. Computer simulations utilized.

590. Biomechanics (3)

Prerequisites: Civil and Environmental Engineering 301 and Engineering Mechanics 340.

Application of engineering methodologies for quantitative understanding of biological/physiological phenomena. Continuum mechanics principles. The cardiovascular system and its components viewed from a mechanistic standpoint.

596. Advanced Mechanical Engineering Topics (1-3) I, II

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 of six units for any combination of Mechanical Engineering 496, 499 and 596 applicable to a bachelor's degree. Maximum combined credit of six units of Mechanical Engineering 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

Mexican American Studies

Refer to "Chicana and Chicano Studies" in this section of the catalog.

Military Science

In the College of Professional Studies and Fine Arts
ences 451

OFFICE: Exercise and Nutritional Sci-

TELEPHONE: (619) 594-4943

FAX: (619) 594-7084

Faculty

Chair: Roberts

Professor: Roberts

Assistant Professors: Graef, Hergenroeder, Potter

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 both a four-year and a two-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 two-unit introductory courses each semester. The second year consists of two-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 Advanced Camp 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 \$1,500 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 summer basic camp course of instruction (Military Science 221) provides the military skills and leadership training normally taught during the freshman and sophomore on-campus courses. The basic camp is conducted at Fort Knox, Kentucky, and a paid salary, transportation, meals, and lodging will be furnished. Basic camp 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 three- and two-year scholarships. These scholarships cover all tuition, laboratory, and book fees, and a \$150 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 basic camp at Fort Knox, Kentucky, where you will be in competition only with the students attending the basic 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

The minor in military science consists of a minimum of 15 units to include Military Science 301, 302, 411; and six units selected from Military Science 401, 410, 499, and Sociology 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

LOWER DIVISION COURSES

96. Leadership Laboratory (1) I, II

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 two units. Credit earned in this course not applicable to a bachelor's degree.

100A-100B. Introduction to the US Army (2-2) I, II

Semester I: Structure, organization, and missions of the US Army. Preparation and development for officer status. Semester II: Officer leadership, development, and functions. Emphasizing command responsibilities for a basic foundation of military fundamentals.

210. Contemporary Military Leadership Theories: Individuals and Groups (2) I

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.

211. Contemporary Military Leadership Theories: Organizations (2) II

Leadership at the 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.

221-S. Cadet Basic Field Training (3)

Prerequisite: Sophomore standing.

Five-week field training with training in structure, organization, and missions of the US Army; officer leadership, development, and responsibilities; basic military skills; personal conditioning; oral and written military communications.

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)

301. Skills of Military Leadership (3) I

Techniques and skills required of military leaders. Military methods of instruction, review of essential map reading skills and case studies of military leadership techniques.

302. Theory and Dynamics of the Military Organization (3) II

Current tactical doctrine and military techniques of planning and coordination required to apply doctrine to small unit operations.

401. American Military History (3)

Prerequisite: Senior level standing for Army ROTC students. Open to non-ROTC students with consent of instructor.

Military history from colonial times to present within framework of the nine principles of war, with focus on leadership, weapons, and tactics of US Army.

410. Senior Leadership Seminar (3) I, II

Prerequisites: Military Science 301 and 302.

Leadership and management problems encountered in a mid-level sized organization. Role of the junior officer. Designed to prepare senior cadets for positions as leaders and managers of resources at the platoon/company level.

411. Contemporary Military Policy (3) II

Prerequisites: Military Science 301 and 302.

The military justice system as it has evolved from international law principles and established national security policies. History of military law, the philosophy and structure of the system to include court-martial ethics and decision-making.

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.

499. Special Study (1-3) I, II

Prerequisite: Consent of department chair.

Individual study. Maximum credit six units.

Music

In the College of Professional Studies and Fine Arts

OFFICE: Music 111

TELEPHONE: (619) 594-6031

FAX: (619) 594-1692

EMAIL: music.dance@sdsu.edu

Accredited by the National Association of Schools of Music.

Faculty

Emeritus: Anderson, Biggs, Blyth, Brown, Bruderer, Brunson, Estes, Forman, Genzlinger, Hogg, Lambert, Loomis, Moe, Mracek, Rohfleisch, Rost, Sheldon, Smith, Snider, Yates

Director: Chambers

Professors: Almond, Barra, Chambers, Dutton, Follingstad, Kolar, Liebowitz, Logan, Meadows, Mitchell, O'Donnell, Peterman, Stauffer, Ward-Steinman, Yeager

Associate Professor: Hill

Assistant Professor: McDonald

Lecturers: Friedrichs, Helzer, Warman

Applied Music Instruction

Piano: Darby, Follingstad, Katz, Kolar

Harpichord: Paul

Organ: Plimpton

Voice: Chambers, MacKenzie, Tweed, Westbrook

Flute: Buckley, Payne

Oboe: Barrett

Clarinet: Liebowitz

Saxophone: Hart-Jenkins, Rekevics

Early Instruments: Peterman

Bassoon: Simmons

French Horn: Cable, Gref, Lorge

Trumpet: Price

Trombone: Yeager

Baritone Horn: Dutton

Tuba: Dutton

Percussion: McMahon, Mitchell

Violin: Hill

Viola: Elaine

Cello: Stauffer

Contrabass: G. Biggs

Harp: Hays

Classical Guitar: Benedetti, Kilmer, Romero

Composition: Dutton, Stauffer, Ward-Steinman, D.

Non-Western Instruments: Specialists from specific cultures as available each semester

Jazz Studies: Helzer, Yeager

Opera: Evans-O'Connor

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.

The Major

Music 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. The School of Music and Dance offers an innovative and comprehensive musicianship program as part of the curriculum of all music majors that includes the study of music from

several different cultures. For students seeking a professional degree (Bachelor of Music) this program is designed to ensure that students learn to function as a conductor, performer, teacher, coach, editor, or arranger. All students receive instruction in sight-reading, sight-singing, improvisation and music composition.

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.

The performance of music 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 which 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.

The Bachelor of Arts degree is a liberal arts degree for those students who seek an understanding of and an intimate orientation to the discipline of music without professional goals. This degree enables students to obtain this broad understanding.

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.

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 auditions on their major instrument and piano. The B.A. in Music and the Elementary Music Minor student may, but are not required to have a major instrument. On the basis of these examinations and auditions, recommendations of specific courses will be made by the music faculty adviser. The specific courses are Music 105A, 105B, 106A, 106B, 205A, 205B, 305A, 305B, 405A, 405B; Music 251 and 451 with the appropriate letter suffix; and Music 110A-110B, 110C-110D.

2. Each semester of private instruction concludes with a solo performance before a faculty jury. The jury grade accounts for one-third of the final semester grade; the instructor's grade accounts for the remaining two-thirds.

3. To qualify for upper division study, music majors must pass a Junior Level Examination. This is a more intensive solo performance before a faculty jury at the close of the fourth semester of study in Music 251. If it is not passed, a grade of "I" (Incomplete) is recorded. This must be resolved before enrollment in upper division study is permitted.

4. The Comprehensive Musicianship Aural Skills Examination is a requirement for graduation in the Bachelor of Music degree program. It is given at the end of each semester and may be retaken until passed. The examination includes sight-singing, melodic and harmonic dictation, error detection, chromatic and modern harmony. A final grade of C (minimum) is required in each semester of the CM courses in order to advance to the next higher course.

5. Students must participate in at least one ensemble each semester of enrollment. Please see each degree program and specialization for specific unit requirements. At least one-half of these requirements must be met by participation in a "large" ensemble in which the major instrument or voice is used. Refer to the Music Student Handbook for more details.

6. Attendance at and performance in recitals is a requirement of all music majors as set forth in the music recital regulations.

Refer to the Music Student Handbook for detailed information.

Electives in Music – Non-Majors

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, 110A-110B, 115, 120A, 120B, 120C, 151, 240, 345, 351A, 351B, 351D, 445, and the music courses numbered 170 to 189 and from 369 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 eight units of ensemble courses (Music 170-189, 369-389, 569-589) may be counted toward a bachelor's degree for non-majors.

Music Major

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 10052)

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 not required with this major.

Preparation for the Major. Music 104, 105A, 105B, 110A-110B, 151; four units selected from courses numbered 170 to 189, 204, 205A, 205B. (21 units)

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 27 upper division units to include Music 305A, 305B, 308A, 308B, 347; four units selected from courses numbered 369 through 389; 408A, 592, and seven 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."

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) *General Music.* Music 104, 110A-110B, 110C-110D (may be waived in full or in part by examination); Music 115, 151, four units selected from courses numbered 170 through 189; Music 204, 205A,

205B; five units to include Music 220, 225, 230, 235, 240; four units of Music 251; four lower division music electives. (33 units)

(b) *Music Education.* Music 104, 110A-110B, 110C-110D (may be waived in full or in part by examination); Music 115, 151, four units selected from courses numbered 170 through 189; Music 204, 205A-205B; five units to include Music 220, 225, 230, 235, 240; Music 246A-246B, four units of Music 251. (33 units)

(c) *Performance.* Music 104, 110A-110B, 110C-110D (may be waived in full or in part by examination); Music 151; six units selected from courses numbered 170 through 189; Music 204, 205A-205B; four to eight units of Music 251. (25-29 units)

(d) *Composition.* Music 104, 110A-110B, 110C-110D (may be waived in full or in part by examination); Music 151, six units selected from courses numbered 170 through 189; Music 204, 205A-205B; two units of Music 207; four to eight units of Music 251. (27-31 units)

(e) *Jazz Studies.* Music 104, 151, 166; six units selected from courses numbered 170 through 189; Music 204, 205A-205B; four to eight units of Music 251; Music 266. (25-29 units)

Foreign Language Requirement.

1. Vocalists—competency (equivalent to that which is normally attained in one semester of college study) in French, German, and Italian.

2. Jazz Studies—no foreign language equivalency required.

3. Music Education—competency (equivalent to that which is normally attained in two semesters of college study) in Spanish.

4. All Others—competency (equivalent to that which is normally attained in two semesters of college study) in French, German, or Italian (classical guitar students may substitute Spanish).

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major.

(a) *General Music.* Music 305A-305B, 308A-308B; Music 347; one unit of Music 348 or 349; four units selected from music courses numbered 369 through 389; Music 405A-405B, 408A-408B; four units of Music 451; seven units of upper division music electives. (37 units)

(b) *Music Education.* All candidates for a teacher credential must complete all requirements as outlined in this section of the catalog under Policy Studies or Teacher Education. This major may be used by students in Policy Studies or Teacher Education as an undergraduate major for the Bachelor of Music degree. Music 305A-305B, 308A-308B; Music 343 and three upper division music electives, or Music 554B, 554C, and 554E; Music 346, 347; one unit of Music 348 or 349; four units selected from music courses numbered 369 through 389; Music 405A-405B, 408A-408B; Music 446, four units of Music 451. (40 units)

(c) *Performance.* Music 305A-305B, 308A-308B; Music 347; one unit of Music 348 or 349; Music 367; six units selected from music courses numbered 369 through 389; Music 405A, 408A-408B; eight units of Music 451; Music 497; five units selected from Music 515, 541, 542, 554. (Pianists must include Music 541A and 542A. Vocalists must include Music 541C and 554D). (41 units)

Students specializing in performance must appear in a joint recital during the junior year and must present a solo recital during the senior year. The student must pass an audition of the program to be performed before the music faculty no less than one month in advance of the recitals.

(d) *Composition.* Music 305A-305B, 308A-308B; Music 310, 347; one unit of Music 348 or 349; six units selected from music courses numbered 369 through 389; Music 405A-405B, 408A-408B; eight units of Music 451; Music 497; two units of Music 507. (42 units)

The specialization may not be formalized until completion of Music 205B, or waiver by examination.

Students specializing in composition are required to present a concert of their compositions during the 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.

(e) *Jazz Studies*. Music 305A-305B, 308A-308B, 347, 364A-364B, 366, 367; six units selected from music courses numbered 369 through 389; Music 405A, 408A; eight units of Music 451; Music 466, 497, 566A-566B. (45 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 until such time as the CM requirements are fulfilled.

Music Minor

To be admitted to the minor program, the student must audition to demonstrate vocal or instrumental performing ability.

The minor in music consists of 24 units in music selected from one of the following areas:

Elementary Music Education. Requirements include Music 102, 110A-110B, 115; two units of Music 170-189; four units of Music 220, 225, 230, 235, 240; Music 246A, 343, 345; two units of Music 369-389; and two units of upper division music electives.

Students selecting this minor are not required to audition on an instrument or voice. Students receive a strong multicultural component in Music 343 and 345.

Music (Classical). To be admitted to this area students must take a placement examination in comprehensive musicianship. Requirements include Music 104, 110A-110B, 151; two units selected from Music 170-189; Music 205A, 205B; two units selected from Music 369-389; and eight units of upper division electives selected with the approval of the adviser.

Jazz (Instrumental). Requirements include four units of Music 170 or 370; four units of Music 189 or 389; Music 166, 266, 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.

* Additional prerequisites required.

Courses

LOWER DIVISION COURSES

101. Recitals (1) Cr/NC I, II

Preparation for individual solo performances and attendance at a minimum of 12 concerts or recitals in accordance with music requirements. Maximum credit four units.

102. Basic Musicianship for Non-Music Majors (3) I, II

Two lectures and two hours of activity.

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. Not open to students with credit in Music 105A.

104. Music Technology I (1)

Two hours of activity.

Current technology in music composition, ear-training, score preparation, performance and research practices. Open to music majors and minors only. (Formerly numbered Music 156A.)

105A. Introduction to Elements of Music I (2)

Introduction to music from an aesthetic, communicative, theoretical and creative perspective. Development of understanding of aesthetic valuing, musical notation, rhythm, theory, pitch, and musical terminology. Not open to students with credit in Music 102.

105B. Introduction to Elements of Music II (2)

Prerequisite: Music 105A.

Continuation of Music 105A.

106A. Introduction to Aural Skills I (1) Cr/NC

Three hours of activity.

Introduction to sight-singing and music dictation. Not open to students with credit in Music 102.

106B. Introduction to Aural Skills II (1) Cr/NC

Three hours of activity.

Prerequisite: Music 106A.

Introduction to sight-singing and music dictation continued.

110A-110B. Piano – Elementary Class Instruction (1-1) I, II

Two hours.

Prerequisite: 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.

110C-110D. Piano – Elementary Class Instruction (1-1) I, II

Two hours.

Prerequisites: For 110C: Music 110B with a grade of C (2.0) or better. For 110D: Music 110C with a grade of C (2.0) or better.

Continuation of Music 110A-110B.

115. Voice – Elementary Class Instruction (1) I, II

Two hours.

Prerequisite: Concurrent registration in Music 185.

Mastery of the fundamentals of voice. Not open to voice majors.

120A. Violin and Viola Class Instruction for the Non-Music Major (1) I, II

Two hours.

Prerequisite: Consent of instructor.

Performance studies class in a group lesson environment. Opportunity for observation, instruction, and performance in class situation.

120B. Cello Class Instruction for the Non-Music Major (1) I, II

Two hours.

Prerequisite: Consent of instructor.

Performance studies class in a group lesson environment. Opportunity for observation, instruction, and performance in class situation.

120C. Clarinet Class Instruction for the Non-Music Major (1)

Prerequisite: Consent of instructor.

Performance studies class in a group lesson environment. Opportunity for observation, instruction, and performance in the class situation.

151. Introduction to Music (3) I, II

Practical approach to hearing music with understanding and pleasure, through study of representative compositions of various styles and performance media, great musicians and their art. Music correlated with other arts through lectures, recordings, concerts.

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.

170. Chamber Music (1) I, II

Three hours. Four hours for opera.

Prerequisite: Consent of instructor.

Sections for string, woodwind, brass, piano, vocal, and mixed ensemble groups. May be repeated with new content. See Class Schedule for specific content. Maximum credit four units.

174. Concert Band (1) II

Five hours.

Prerequisite: Consent of instructor.

Study and public performance of representative literature for ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

175. Marching Band (2) I

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.

176. Wind Symphony (1) I, II

Five hours.

Prerequisite: Consent of instructor.

Study and performance of representative literature for the ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

180. Symphony Orchestra (1) I, II

Five hours.

Prerequisite: Consent of instructor.

Maximum credit four units.

184. Opera Theatre (2) I, II

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. (Formerly numbered music 153.)

185. Concert Choir (1) I, II

Five hours.

Prerequisite: Consent of instructor.

Maximum credit four units.

186. Chamber Singers (1) I, II

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.

189. Jazz Ensemble (1) I, II

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.

204. Music Technology II (1)

Two hours of activity.

Prerequisite: Music 104.

Current technology in music composition, ear-training, score preparation, performance, and research practices. Open to music majors and minors only. (Formerly numbered Music 156B.)

205A. Comprehensive Musicianship (3)

Two lectures and two hours of laboratory.

Prerequisite: Music 105B or passing placement examination. Concurrent registration in Music 204.

Music theory, harmony, and musicianship. Instrumentation and notation, composition and arranging. World Music Laboratory: African ensemble and dance. Open to music majors and minors only. (Formerly numbered Music 155A.)

205B. Comprehensive Musicianship (3)

Two lectures and two hours of laboratory.

Prerequisite: Music 205A with a grade of C (2.0) or better.

Tonal harmony in the common-practice period. Composition with ostinato forms. World Music Laboratory: Javanese gamelan. Open to music majors and minors only. (Formerly numbered Music 155B.)

206A-206B. Aural Skills (1-1) Cr/NC

Prerequisite for Music 206A: Music 106B. Prerequisite for Music 206B: Music 206A.

Preparation for Junior Level Aural Skills Examination. For music majors only. (Formerly numbered Music 103A-103B.)

A. Sight Singing

B. Melodic, Two-Part Contrapuntal and Four-Part Harmonic Dictation

207. Composition Laboratory (1)

Three hours of laboratory.

Prerequisite: Consent of instructor.

Original writing in different homophonic and polyphonic forms for various media. Maximum credit two units.

220. 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.

225. 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.

230. Brass – Elementary Class Instruction (1)

Two hours.

Fundamentals of brass instruments by lecture and acquisition of elementary skills.

235. 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.

240. Guitar – Elementary Class Instruction (1) I, II

Two hours.

Open to all students interested in fundamentals of guitar and elementary music skills.

246A. Practicum in Music I (2) II

One lecture and two hours of activity.

Introduction to music education. Exposure to music teaching profession at all grade levels before choosing an area of specialization. (Formerly numbered Music 146.)

246B. Practicum in Music 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. (Formerly numbered Music 246.)

251. Performance Studies (1-2) I, II

Fifteen one-half hour private lessons for one unit; fifteen one-hour private lessons for two units.

Prerequisite: 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

H. Harp

B. Voice

I. Jazz Instruments

C. Woodwinds

J. Medieval or Renaissance

D. Brass

Instruments

E. Percussion

K. Non-Western Instruments

F. Strings

L. Composition

G. Classical Guitar

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.

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)**

301. Recitals (1) Cr/NC I, II

Preparation for individual solo performances and attendance at a minimum of 12 concerts or recitals in accordance with music requirements. Maximum credit four units.

305A. Comprehensive Musicianship (3)

Two lectures and two hours of laboratory.

Prerequisites: Music 205B with a grade of C (2.0) or better. Concurrent registration in Music 308A.

Counterpoint in 16th and 18th century styles. Composition of a two-voice motet and three part fugue. Instrumentation and choral reading. World Music Laboratory: South Indian rhythmic skills. Open to music majors and minors only. (Formerly numbered Music 255A, 255B, 256A, 256B, 355A, 355B, 356A, 356B.)

305B. Comprehensive Musicianship (3)

Two lectures and two hours of laboratory.

Prerequisites: Music 305A with a grade of C (2.0) or better. Concurrent registration in Music 308B.

Theory and harmony of 19th and early 20th centuries. Analytic techniques, composition in sonata form. World Music Laboratory: Latin American ensemble. Open to music majors and minors only. (Formerly numbered Music 255A, 255B, 256A, 256B, 355A, 355B, 356A, 356B.)

308A. Music History: Medieval – Renaissance (2)

One lecture and two hours of laboratory.

Prerequisites: Music 151. Concurrent registration in Music 305A.

European art music from ancient Greece through the Renaissance. 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. (Formerly numbered Music 157B, 257A.)

308B. Music History: Baroque – Classic (2)

One lecture and two hours of laboratory.

Prerequisite: Music 308A. Concurrent registration in Music 305B.

European art music from 1600 to 1830. 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. (Formerly numbered 257B, 357A.)

310. Electronic Music (2)

One lecture and three hours of laboratory.

Prerequisite: Consent of instructor.

Concepts, terminology and history combined with composition and recording projects introducing analog electronic music with multi-track recording and analog synthesizers; or digital electronic music using digital synthesizers and computer software. May be repeated with new content. Maximum credit four units.

343. Music Literature for Children (3) I, II

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.

345. World Music in Contemporary Life (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations 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.

346. Practicum in Music III (2) I

One lecture and two hours of activity.

Prerequisite: Music 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.

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.

348. Choral Conducting (1)

Prerequisite: Music 347 with a grade of C (2.0) or better.

Elements of baton technique and development of skills common to choral conducting. Representative literature and techniques for choral organizations studied and performed. Practical experience in typical conducting situations.

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.

351. Great Music (3) I, II

Prerequisite for Music 351A-D: Completion of the General Education requirement in Foundations II.C., Humanities.

Significant music literature of the various historical periods with emphasis on the stylistic characteristics through directed listening.

A. Musical Masterpieces of the Eighteenth and Nineteenth Centuries

B. Musical Masterpieces of the Twentieth Century

D. Jazz History and Appreciation

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.

366. Elements of Jazz III (2)

Prerequisite: Music 266.

Post bop repertoire, altered modes and scales, solo transcription, analysis, and ear-training.

367. Junior Recital (1) Cr/NC I, II

Prerequisite: Junior standing in music.

Selection of literature for recital program not to exceed 30 minutes in length; theoretical analysis and historical study of scores chosen; preparation and public performance; and examination before committee of music faculty.

Performance Organization Courses

(Music 369 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.

369. Collegium Musicum (1) I, II

Prerequisite: Consent of instructor.

Performance of medieval and renaissance music on reproductions of historical instruments. May be repeated with new content. See Class Schedule for specific content. Maximum credit four units.

370. Chamber Music (1) I, II

Three hours. Four hours for opera.

Prerequisite: Consent of instructor.

Section for string, woodwind, brass, piano, vocal, and mixed ensemble groups. May be repeated with new content. See Class Schedule for specific content. Maximum credit four units.

374. Concert Band (1) II

Five hours.

Prerequisite: Consent of instructor.

Study and public performance of representative literature for ensemble. Practical experience in rehearsal techniques. Maximum credit four units.

375. Marching Band (2) I

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.

376. Wind Symphony (1) I, II

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.

380. Symphony Orchestra (1) I, II

Five hours.

Prerequisite: Consent of instructor.

Maximum credit four units.

384. Opera Theatre (2) I, II

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. (Formerly numbered Music 353.)

385. Concert Choir (1) I, II

Five hours.

Prerequisite: Consent of instructor.

Maximum credit four units.

386. Chamber Singers (1) I, II

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.

389. Jazz Ensemble (1) I, II

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.

397. Issues in Music Education (Credit to be arranged) (Offered only in Extension)

Prerequisites: Consent of instructor and bachelor's degree.

Study of specially selected issues in music education. Does not apply to undergraduate degrees or completion of teaching credential.

405A. Comprehensive Musicianship (3)

Two lectures and two hours of laboratory.

Prerequisites: Music 305B with a grade of C (2.0) or better. Concurrent registration in Music 408A.

Harmony and counterpoint in the 20th century, from Impressionism to present. Analysis and composition in post-tonal or 12-tone techniques. World Music Laboratory: Asian or folk ensemble. (Formerly numbered Music 455A, 456A.)

405B. Comprehensive Musicianship (3)

Two lectures and two hours of laboratory.

Prerequisites: Music 405A with a grade of C (2.0) or better. Concurrent registration in Music 408B.

Musical developments in last half of 20th century. Independent projects in composing and arranging for small and large ensembles. Laboratory: New music ensemble. Open to music majors and minors only. (Formerly numbered Music 455B.)

408A. Music History: Romantic – Twentieth Century (2)

One lecture and two hours of laboratory.

Prerequisites: Music 308B. Concurrent registration in Music 405A.

European art music from 1800 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. (Formerly numbered Music 357B, 457A.)

408B. Music History: Jazz Survey and Improvisation (2)

One lecture and two hours of laboratory.

Prerequisites: Music 408A. Concurrent registration in Music 405B.

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. (Formerly numbered Music 456B, 457B.)

445. Performing Arts and Culture (1)

Prerequisite: Upper division standing.

Exploration of traditional performing arts of different contemporary world cultures, with emphasis on kinesthetic and psychological aspects of experience of performance. Open to all upper division students. May be repeated with new content. Maximum credit three units.

446. Practicum in Music IV (2) II

One lecture and two hours of activity.

Prerequisite: Music 346 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 will be discussed.

451. Performance Studies (1-2) I, II

Fifteen one-half hour private lessons for one unit; fifteen one-hour private lessons for two units.

Prerequisite: 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 | H. Harp |
| B. Voice | I. Jazz Instruments |
| C. Woodwinds | J. Medieval or Renaissance Instruments |
| D. Brass | K. Non-Western Instruments |
| E. Percussion | L. Composition |
| F. Strings | |
| G. Classical Guitar | |

466. Elements of Jazz IV (2)

Prerequisite: Music 366.

Atonal and aeromedical theories and philosophy, research paper, solo transcription, analysis, and ear-training.

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.

497. Senior Recital (2) Cr/NC I, II

Prerequisite: Senior standing in music.

Selection of literature for recital program not to exceed one hour in length; theoretical analysis and historical study of scores chosen; preparation and public performance; and examination before committee of music faculty.

499. Special Study (1-3) I, II

Prerequisite: Consent of the music director.

Individual study. Maximum credit six units.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

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.

515. Professional Orientation for Music Performers (2)

One lecture and two hours of activity.

Prerequisites: Twelve units of upper division or graduate standing in B.M. or M.M. degree. Others by consent of instructor.

Conditions met in professional music world as well as opportunities available. Auditions, contracts, legal and tax responsibilities, media and press promotion, grants, professional management, apprenticeships.

541. Performance Studies Pedagogy (3)

Two lectures and three hours of laboratory.

Prerequisite: Consent of instructor.

Teaching beginning and intermediate applied music. Survey and evaluation of teaching materials. Observation of individual or group lessons.

- | | |
|-----------------|-----------------|
| A. Piano | C. Voice |
|-----------------|-----------------|

542. Performance Studies Laboratory (2)

One lecture and three hours of laboratory.

Prerequisites: For 542A: Music 541A with a grade of C (2.0) or better. For 542C: Music 541C with a grade of C (2.0) or better.

Practical experience in the teaching of individual or group lessons.

- | | |
|-----------------|-----------------|
| A. Piano | C. Voice |
|-----------------|-----------------|

543. Diction (1)

Principles of pronunciation and enunciation. Application to song and opera in English, Italian, German, and French.

554. Music Literature (2) I, II

Prerequisite: Music 205B with a grade of C (2.0) or better.

Study of literature in areas listed. Analysis of scores and recordings. See Class Schedule for specific content. Maximum credit six units applicable to a master's degree.

- A. Chamber Music Literature
- B. Orchestral Literature
- C. Band Literature
- D. Song Literature
- E. Choral Literature
- G. Keyboard Literature (Seventeenth Century through Beethoven)
- H. Keyboard Literature (Schubert to the Present)

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.

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.

569. Advanced Collegium Musicum (1) I, II

Prerequisite: Music 369.

Preparation and performance of representative works by a specific medieval or renaissance composer on historical instruments. May be repeated with new content. See Class Schedule for specific content. Maximum credit four units.

570. Advanced Chamber Music (1) I, II

Three hours.

Prerequisite: Consent of instructor.

Study and public performance of established repertory as well as new compositions. Sections for string, woodwind, brass, piano and mixed ensemble groups. May be repeated with new course content. See Class Schedule for specific content. Maximum credit four units.

576. Wind Symphony (1) I, II

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.

580. Symphony Orchestra (1) I, II

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. (Formerly numbered Music 581.)

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. (Formerly numbered Music 553.)

585. Concert Choir (1) I, II

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.

586. Chamber Singers (1) I, II

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.

589. Jazz Ensemble (1) I, II

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.

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.

591. Theory and Practice of Musical Expression and Interpretation (2)

Prerequisite: Music 305B with a grade of C (2.0) or better.

Musical perception as it pertains to expressive aspects of performance. Theories of interpretation and ways in which performers can create impulse to shape its inherent architectonic structure.

592. Analogs in Music, Art, and Literature (3)

Prerequisite: At least one survey course in music history or appreciation, art history, or comparative literature.

Cross-influences and correspondences in the arts from the standpoints of style, texture, rhythm, and form.

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. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

Natural Science

In the College of Sciences

OFFICE: Physics 131
TELEPHONE: (619) 594-6240

Faculty

Emeritus: Dessel, Feher, May, Merzbacher, Shull, Thompson
Program Coordinator: Roeder, P.

Faculty: Berry (Geological Sciences), Dowler (Biology), Fisher (Biology), Frost (Geological Sciences), Goldberg (Physics), Metzger (Chemistry), Robinson (Geological Sciences), Wallace (Physics)

Offered by Natural Science

Teaching major in physical science for the single subject teaching credential in science.

Minor in history of science and technology.

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.

Physical Science Major

In preparation for the Single Subject Teaching Credential in Science/Physical Science

With the B.S. Degree in Applied Arts and Sciences (Major Code: 19011)

One of the requirements for acceptance into the College of Education's post-baccalaureate credential program is to either pass the appropriate PRAXIS and SSAT 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 with the Cross-Cultural, Language, and Academic Development (CLAD) emphasis must complete the requirements outlined in the catalog under Teacher Education or Policy Studies. Contact the Center for Careers in Education or the Policy Studies in Language and Cross-Cultural Education Department for up-to-date information on prerequisites.

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.

I. Communication and Critical Thinking (9 units)

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

1. Oral Communication (3 units) to be satisfied by Africana Studies 140, Chicana and Chicano Studies 111A, or Communication 103.

2. Composition (3 units) to be satisfied by Africana Studies 120, Chicana and Chicano Studies 111B, or Rhetoric and Writing Studies 100.

3. Intermediate Composition and Critical Thinking (3 units) to be satisfied by Africana Studies 200 or Rhetoric and Writing Studies 200.

II. Foundations (28 units)

A. Natural Sciences and Quantitative Reasoning (13 units):

1. Physical Sciences (6 units) to be satisfied by Chemistry 200 and Physics 195.

2-3. Life Sciences and Laboratory (4 units) to be satisfied by Biology 201.

4. Mathematics/Quantitative Reasoning (3 units) to be satisfied by Mathematics 150.

B. Social and Behavioral Sciences (6 units). See Graduation Requirements section of the catalog.

C. Humanities (9 units):

Complete a course in each of three of the following four areas (1. Literature; 2. Art, Classics, Humanities, Music, and Theatre; 3. Philosophy and Religious Studies; 4. Foreign Language) in the Humanities section of the Foundations component of the regular General Education program. Refer to General Education course offerings in the Graduation Requirements section of the catalog. One semester of a foreign language is recommended.

III. American Institutions

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.

IV. Explorations (9 units)

A. Upper division Social and Behavioral Sciences (3 units). Linguistics 420 is recommended.

B. Upper division Humanities to be satisfied by History 441 (3 units).

C. Upper division Humanities (3 units). A course in cultural diversity is required. Refer to Part C of Explorations under the General Education requirements section in the catalog.

The Major

Preparation for the Major. Africana Studies 140, Chicana and Chicano Studies 111A, or Communication 103; Africana Studies 120, Chicana and Chicano Studies 111B, or Rhetoric and Writing Studies 100; Africana Studies 200 or Rhetoric and Writing Studies 200; Astronomy 101, 109; Biology 201, 202; Chemistry 200, 201; Computer Science 106; Geological Sciences 100, 101; Mathematics 150, 151, 252; Physics 195, 195L, 196, 196L, 197, 197L. (63 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units to include Biology 452; Mathematics 342A, 342B; Oceanography 541; Physics 311, 317, 350, 354A, 357, 400A, 460; and three units selected from Natural Science 333 or Physics 301.

Additional Requirements for Subject Matter

Preparation Certification

Satisfactory Grades. At most one course with a C- or lower among the courses listed under Preparation for the Major, and at most one course with a C- or lower among the courses listed under the Major. If a course is repeated, the highest grade will count.

Formative Assessment. Completion of a satisfactory, preliminary portfolio two semesters prior to graduation. Contact the subject matter preparation adviser for information.

Summative Assessment. Completion of a satisfactory, final portfolio, and a positive recommendation from a committee consisting of the instructor of Physics 357, the Department of Physics chair, and the subject matter preparation program adviser.

Minor in History of Science and Technology

The minor in the history of science and technology consists of a minimum of 18 units to include Natural Science 315 and 316, and 12 units selected from Natural Science 317; History 484, 485; Mathematics 303; Philosophy 537.

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

LOWER DIVISION COURSE

100. Physical Science (3) I, II

Introduction to concepts and processes in science intended to show why science is essential to a liberal education by recognizing relationship with other areas of knowledge such as philosophy, literature, fine arts, economics. Emphasis varies with instructor.

UPPER DIVISION COURSES (Intended for Undergraduates)

305. Quantum Reality - From Quarks to Quasars (3)

Prerequisite: Completion of the General Education requirements in Communication and Critical Thinking and Foundations II.A., Natural Sciences and Quantitative Reasoning.

Universe viewed from small (elementary particles) to very large (cosmology) with emphasis on structural aspects of physical theories of the universe and how they came to be formed. (Formerly numbered Physics 305.)

315. History of Science I (3)

Prerequisites: Completion of the General Education requirement in Foundations II.A., Natural Sciences and Quantitative Reasoning, and one of the following courses: Humanities 101, History 100, 101, 105, 106. Recommended: Astronomy 101. General Education prerequisite not required for Physical Science majors.

The growth and development of science from antiquity to the fifteenth century. Emphasis on man's cognitive reactions to his environment through the coalescence of the occult arts, empirical practices and rational thought associated with early scientific theory.

316. History of Science II (3)

Prerequisites: Completion of the General Education requirement in Foundations II.A., Natural Sciences and Quantitative Reasoning, and

one of the following courses: Humanities 101, History 100, 101, 105, 106. Recommended: Astronomy 101 and a course in chemistry. General Education prerequisite not required for Physical Science majors.

The major developments during the sixteenth through nineteenth centuries of the scientific revolution, the rise of empiricism, the emerging role of scientific societies. Histories of particular theories in both the life sciences and physical sciences.

317. Development of Scientific Thought (3)

Prerequisites: Completion of the General Education requirement in Foundations II.A., Natural Sciences and Quantitative Reasoning.

Basic scientific concepts and their historical development with emphasis on the problem of theory construction. The relationship between disciplined imagination and observational fact, as illustrated by selected case histories. Limitations of scientific inquiry.

333. Technology and Human Values (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations II.A., Natural Sciences and Quantitative Reasoning. Recommended: Natural Science 100.

Technologies such as solar and fusion power, lasers, computer services, transport, synthetic food and their impact on values and lifestyles of developed countries. Characteristics of post-industrial society, future shock and biological revolution. Curve extrapolation and simulation by games and computer.

412A-412B-412C-412D. Processes and Inquiry in the Natural Sciences (4-4-4-4) I, II

Three lectures and two hours of activity.

Prerequisite: Completion of the General Education requirement in Foundations II.A., Natural Sciences and Quantitative Reasoning.

Investigation of processes of inquiry and rational thinking skills characteristic of the sciences.

- A. Physical Sciences
- B. Properties of Matter and Astronomy
- C. Life Sciences
- D. Earth Sciences

UPPER DIVISION COURSE (Also Acceptable for Advanced Degrees)

596. Special Topics in Natural Science (1-4) I, II, S

Prerequisite: 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. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES Refer to Bulletin of the Graduate Division.

Naval Science

In the College of Professional Studies and Fine Arts
ences 141

OFFICE: Exercise and Nutritional Sci-

TELEPHONE: (619) 594-3730

FAX: (619) 594-7848

Faculty

Chair: Singleton

Professor: Singleton

Associate Professor: Gurley

Assistant Professors: Roberts, Sprague, Ulses, Vinge

Offered by the Department

Minor in naval science.

NROTC Curriculum

The Department of Naval Science offers two programs, a scholarship and a nonscholarship program leading to a commission in the United States Naval Reserve or United States Marine Corps Reserve. Scholarship Program students receive tuition, fees, books and a stipend of \$150 per month while nonscholarship or college program students receive a \$150 per month stipend during their final two years of college. All students receive instruction in essential naval science subjects which, in conjunction with a baccalaureate degree in the field of their major, qualifies them for commissions as Ensign, United States Naval Reserve or Second Lieutenant, United States Marine Corps Reserve.

Naval science courses are open to all students having an interest in history, national security, foreign policy, organizational leadership, management and the military services. Enrollment in the Naval Reserve Officer Training Corps (NROTC) is not a requirement for taking naval science courses.

Naval Science Minor

The minor in naval science consists of a minimum of fifteen 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

LOWER DIVISION COURSES

101. Introduction to Naval Science (2) I

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.

102. Naval Ships Systems I (3) II

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.

201. Naval Ships Systems II (3) I

Theory and principles of operation of naval weapon systems. Includes radars, gun and missile systems, underwater detection and tracking, and basic naval ordnance. Case studies of weapon systems employment with emphasis on accountability and responsibility of naval leader.

202. Sea Power and Maritime Affairs (3) II

Sea power and maritime affairs; general concept of sea power including Merchant Marine; role of naval warfare components used to support the Navy's mission; sea power as an instrument of national policy; comparative study of US and Soviet strategies.

UPPER DIVISION COURSES (Intended for Undergraduates)

301. Navigation and Naval Operations I (3) I

Piloting, navigation, and maneuvering. Use of charts, visual and electronic aids, operation of magnetic and gyro compasses, relative-motion vector analysis, formation tactics, and ship employment. Other topics include tides, currents, wind and weather, navigation instruments and characteristics of electronic navigation.

302. Navigation and Naval Operations II (3) II

Prerequisite: Naval Science 301.

Rules of nautical road, 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 navigation and ship movement.

310. Evolution of Strategic Operations (3) II

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.

401. Naval Leadership and Management I (3) I

Principles of naval leadership and management. Development of skills in areas of communications, counseling, control, direction, management, and leadership.

402. Naval Leadership and Management II (3) II

Prerequisite: Naval Science 401.

Naval leadership and management with emphasis on military justice administration, naval personnel management, material management, and administration of discipline.

410. Amphibious Operations (3) I

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: Hardy Tower 58
TELEPHONE: (619) 594-5357
FAX: (619) 594-2765

Agency Member of the American College of Nurse Midwives, National League for Nursing, and the American Association of Colleges of Nursing. Accredited by the American College of Nurse Midwives, California Board of Registered Nursing, and the National League for Nursing Accrediting Commission.

Faculty

Emeritus: Black, Dillon (Salerno), Gulino, Hines, Laiho, LaMonica, Lantz, Leslie, Moffett, Thomas, Verderber
Director: Wahl
Associate Director: Freitas
Professors: Blenner, Heineken, Loveridge, Riegel, Shively, Wahl, Walker, Wozniak
Associate Professors: Broom, Fitzsimmons, Flagg, Freitas, Hadley, Morris, Reed, Saarmann
Assistant Professors: Gilbert, Rapps
Lecturers: Burt, Coffin-Romig, Daugherty, Galang, Handysides, Lischke, Long, McCarthy, Parr

Offered by the School of Nursing

Master of Science degree in nursing.
Major in nursing with the B.S. degree in applied arts and sciences.
Health services credential.

The Major

The nursing profession is concerned with the total health care of the individual and the family. It is a profession which 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 humanistic sciences, as well as in specific nursing practice skills and techniques.

Students in the nursing program are provided opportunities to acquire knowledge from the natural and social sciences; to develop critical thinking and professional 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 and trends 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.

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

- 1. Prerequisite Courses.** The following courses, or their equivalents, and course grades are required for admission to the nursing program:
 - a. Course grade requirement (C or better) in each of these required university courses: Biology 100, Chemistry 130, Psychology 101, Sociology 101, and oral communication.
 - b. Course grade requirement (B or better) in each of these required university courses: Biology 210 and 212.
- 2. Minimum Grade Point Average.** Applicants must complete the seven prerequisite courses with a minimum overall grade point average of 2.5.
- 3. Writing Competency Requirement.** Prior to admission to the School of Nursing, all students must demonstrate their writing competence on one of the following tests.
 - a. By a score of 470 on the verbal portion of the Scholastic Aptitude Test if taken prior to March 1995. A score of 550 is required if taken after March 1995.
 - b. By a score of 25 on the American College Tests.
 - c. By a score of 150 on the English Placement Test with score of 7 on essay portion.
 - d. By a score of 8 on the SDSU Writing Competency Examination or earning credit (Cr) in one of the following courses: Rhetoric and Writing Studies 92A and/or 92B, 94, 95, 97A and/or 97B prior to admission to the nursing program.
- 4. Additional Point System.** Applicants requesting admission to the professional coursework will be ranked and evaluated on the basis of a point system. A maximum of 87 points can be earned in meeting the prerequisite courses, writing competency, recognition of outstanding achievement, health care experience and bilingual ability requirements, and applicants will be ranked in accordance with points earned. Letters of reference will be required to verify specific achievements, leadership, participation and work experience. For specific additional point system allocation, consult the School of Nursing office.
- 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 School of Nursing office.
- 6. Academic Credit Through Examination.** Academic credit by examination may be obtained by those whose prior education and/or experience provides the knowledge and skills required to meet the objectives of one or more courses. Students who believe they may be eligible for credit by examination should contact the School of Nursing office for an appointment for special advising prior to submitting their application for admission. For University policy regarding credit-by-examination, consult "Academic Credit Through Examination" in the "General Regulations" section of this catalog.
- 7. Registered Nurse – Bachelor of Science, Major in Nursing Program.** A registered nurse–Bachelor of Science in nursing program is available for registered nurses with either an Associate Degree in Nursing or a Diploma in Nursing. This program gives

credit for previous coursework and is designed with flexible class scheduling and innovative teaching strategies for the working nurse. Students eligible for this option should contact the School of Nursing office for special advising and program planning.

- 8. Formal Application.** Applicants must make an application to the University according to deadlines for impacted programs. In addition, application to the nursing program can be made during the semester that the student is completing prerequisite non-nursing courses (23 units). Application forms may be obtained at the School of Nursing office. Consult the School of Nursing for the deadline date.

Special Instructions

- 1. Impacted Program.** The nursing major is designated as an impacted program and specific regulations related to admissions are imposed. Consult "Impacted Programs" in the "Admissions" section of this catalog for regulations.
- 2. Full-Time/Part-Time Study.** Students are encouraged to enroll in all of the nursing courses scheduled each semester. However, part-time enrollment can be arranged by contacting the undergraduate adviser within the school.
- 3. Liability Insurance and Transportation.** Students enrolled in the nursing program are required to provide their own professional liability insurance and transportation to off-campus clinical agencies and for home visits.
- 4. Honors Program.** The honors program is available to students in the senior level who meet the criteria. Four units of honors courses constitute the honors program and will be validated as such on the official transcript. Less than four units completed will not be validated as "honors," but may be credited as a special studies program.
- 5. Health Insurance.** All students are advised to obtain health insurance coverage. Students are responsible for health care cost when services are rendered by a health care agency.
- 6. CPR Certification.** Students are required to be certified prior to admission. American Heart Association (AHA) certification, health care provider course or American Red Cross (ARC) Professional Rescue is required. (Both Level C.)
- 7. Licensure.** Students should request consultation with the undergraduate adviser regarding problems of license by endorsement with other states if the R.N. license examination is taken prior to degree completion.
- 8. 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		
Units				
	BIOL 210	Fundamentals of Microbiology	4	
	BIOL 261	Human Physiology	4	
*	#NURS 308	Adult Health Nursing	6	
	NURS 312	Concepts in Professional Nursing	3	
#	NURS 314	Gerontological Nursing	3	
	NURS 354	Nursing care of the Childbearing Family	5	
	OR			
	NURS 356	Parent-Child Nursing.....	5	
*	#NURS 416	Psychiatric-Mental Health Nursing	5	
		Total	30	

* Includes management/evaluation of patient care.
Includes geriatric nursing.

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.

- I. Communication and Critical Thinking:** 9 units
 1. Oral Communication (3 units)
 2. Composition (3 units)
 3. Intermediate Composition and Critical Thinking (3 units)
- II. Foundations:** 28 units
 - A. Natural Sciences and Quantitative Reasoning (10 units)
 1. Physical Sciences (3 units) to be satisfied by:
Chemistry 130 (3 units)
 2. Life Sciences (3 units) to be satisfied by:
Biology 100 (3 units)
 3. Laboratory (1 unit) to be satisfied by:
Biology 210
or
Biology 212
or
Biology 261
 4. Mathematics/Quantitative Reasoning (3 units)
 - B. Social and Behavioral Sciences (6 units) to be satisfied by:
Psychology 101 (3 units)
Sociology 101 (3 units)
 - C. Humanities (12 units)
Refer to General Education course offerings in the Graduation Requirements section of the catalog.

III. American Institutions: 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.

IV. Explorations: Nine units to include Psychology 351 and six upper division units in Humanities or Social and Behavioral Sciences. Three units must be selected from a course of cultural diversity. Refer to General Education course offerings in the Graduation Requirements section of the catalog.

Nursing Major

With the B.S. Degree in Applied Arts and Sciences (Premajor Code: 12030) (Major Code: 12031)

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 are eligible to take the State Board Registered Nurse license examination after completing seven semesters of the prescribed curriculum. Graduates are eligible to apply for the California Certificate of Public Health Nursing.

Nursing majors may be part-time students in the curriculum. Consultation with the undergraduate adviser is mandatory.

Preparation for the Major. Upon acceptance into the program, Nursing 202, 206, 252, 254; three units in statistics should be selected from General Education requirements in Foundations II.A., Mathematics/Quantitative Reasoning; and three units in growth and development or Psychology 230. (24 units)

NOTE: A grade of C (2.0) or better is *required* in all nursing courses except Nursing 453 which, as an elective is exempt from this requirement. No nursing course may be repeated more than once. A grade of C (2.0) or better or Cr is required in corequisite courses. (Biology 261, Psychology 351, growth and development, and statistics).

Sequence of Courses in the Nursing Curriculum

First Year			
<i>First Semester</i>	<i>Units</i>	<i>Second Semester</i>	<i>Units</i>
Biology 100	3	Biology 210	4
Chemistry 130	3	Biology 212	4
Sociology 101	3	Psychology 101	3
G.E. (Written Communication)	3	G.E. (Written Communication)	3
G.E. (Oral Communication)	3	General Education	3
	<hr/> 15		<hr/> 17

Second Year			
<i>First Semester</i>	<i>Units</i>	<i>Second Semester</i>	<i>Units</i>
Biology 261	4	Child & Fam. Dev. 270 or Psych. 230 ...	3
Nursing 202	4	Nursing 252	5
Nursing 206	5	Nursing 254	3
General Education	3	American Institutions.....	3
	<hr/> 16	GE (Statistics)	3
			<hr/> 17

Third Year			
<i>First Semester</i>	<i>Units</i>	<i>Second Semester</i>	<i>Units</i>
Psychology 351	3	Nursing 307	3
Nursing 308	6	Nursing 354	5
Nursing 314	3	Nursing 356	5
Nursing 456	3	General Education	3
	<hr/> 15		<hr/> 16

Fourth Year			
<i>First Semester</i>	<i>Units</i>	<i>Second Semester</i>	<i>Units</i>
Nursing 414	6	Nursing 458	5
Nursing 416	5	Nursing 460	2
General Education	6	Nursing 452, or 454.....	5
	<hr/> 17	American Institutions	3
			<hr/> 15

Progress in the nursing program is dependent upon completion of nursing courses in the prescribed sequence as outlined above. Students will not be permitted to progress to the next semester until nursing courses are completed from the previous semester.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 48 upper division units in nursing to include Nursing 307, 308, 314, 354, 356, 414, 416, 456, 458, 460; and 452 or 454.

Health Services Credential

(Credential Code: 00600)

San Diego State University offers curricula leading to the Health Services Credential. This authorizes the holder to serve as a School Nurse. For information concerning the credential, the student is referred to the School of Nursing Office, HT-58.

The Health Services Credential has been approved by the Commission on Teacher Credentialing.

All applicants seeking admission to the Health Services Credential program *must* be admitted to the University and accepted as a classified postbaccalaureate student.

Standards for Admission

1. Baccalaureate degree in nursing or related field (including community health nursing).
2. Current California Registered Nurse License.
3. Required admission and planning interview with program adviser.

Program

The following program elements are required of all health services credential candidates: (31 units)

	<i>Units</i>
NURS 500 Advanced Health Assessment and Health Promotion	4
NURS 670 School Nursing Management Practices.....	3
NURS 672 Primary Health Care of the School-Aged Child	3
NURS 674 Health Education for School Nurses	3
NURS 900 Current Concepts in Community Health Nursing	3
NURS 901 Family Health Theory and Nursing Practice	3
NURS 902 Primary Health Care of School-Aged Child Practicum	3
C DIS 540 Hearing Conservation and Audiometry for School Nurses	3
SPED 500 Human Exceptionality	3
Electives: Three units to be selected with approval of adviser.	

Courses

LOWER DIVISION COURSES

202. Client Assessment (4)

Two lectures and six hours of laboratory.

Prerequisites: Admission to nursing program and concurrent registration in Nursing 206 and Biology 261.

Determining and measuring variables relevant to assessment of psychosocial and physical functioning.

206. Nursing Practice I (5)

Three lectures and six hours of laboratory.

Prerequisites: Admission to nursing program and concurrent registration in Nursing 202 and Biology 261.

Basic nursing skills and integration of diagnosis, planning, and implementation of nursing care. Application of nursing process.

252. Nursing Practice II (5) I, II

Three lectures and six hours of laboratory.

Prerequisites: Nursing 202, 206, Biology 261, and concurrent registration in Nursing 254.

Focus on psychological, social and biological stressors affecting man's health status and the modalities of nursing intervention which promote health. Emphasis on developmental and situational stressors commonly experienced in modern society and man's adaptive and maladaptive behavioral and biological responses from adulthood through senescence.

254. Nurse-Client Relationships: Cultural and Mental Health Concepts (3)

Prerequisites: Nursing 202 and 206; concurrent registration in Nursing 252.

Nurse-client communication and application to clinical nursing practice. Origins of a variety of communication styles. Cultural and mental health concepts related to communication.

UPPER DIVISION COURSES (Intended for Undergraduates)

307. Nursing Research (3)

Prerequisites: Nursing 308, 314, 456; concurrent registration in Nursing 354 and 356.

Nursing research process. Emphasis on identification of researchable questions and beginning critiquing ability.

308. Adult Health Nursing (6) I, II

Three lectures and nine hours of laboratory.

Prerequisites: Nursing 252, 254; concurrent registration in Nursing 314 and 456.

Application of theories of stressors and/or biological responses specifically affecting the adult on the health-illness continuum. Laboratory focuses on the application of the nursing process in implementing preventive, supportive, and restorative therapeutic modalities which assist the adult client to reestablish, maintain, or develop new adaptive responses.

312. Concepts in Professional Nursing (3) I, II

Prerequisite: R.N., with Associate Degree or Diploma in nursing.

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.

314. Gerontological Nursing (3)

Two lectures and three hours of laboratory.

Prerequisites: Nursing 252, 254; concurrent registration in Nursing 308 and 456.

Theory and selected laboratory experience focusing on stressors affecting elderly on health-illness continuum. Gerontologic nursing in a variety of settings.

354. Nursing Care of the Childbearing Family (5) I, II

Two lectures and nine hours of laboratory.

Prerequisites: Nursing 308, 314, 456; concurrent registration in Nursing 307 and 356.

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.

356. Parent-Child Nursing (5) I, II

Two lectures and nine hours of laboratory.

Prerequisites: Nursing 308, 314, 456; concurrent registration in Nursing 307 and 354.

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.

414. Community Health Nursing (6) I, II

Three lectures and nine hours of laboratory.

Prerequisites: Nursing 307, 354, 356; concurrent registration in Nursing 416.

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.

416. Psychiatric-Mental Health Nursing (5)

Three lectures and six hours of laboratory.

Prerequisites: Nursing 307, 354, 356; concurrent registration in Nursing 414.

Theory and clinical laboratory in application of nursing process to care of clients evidencing maladaptive responses to psychosocial stressors. Presentation of theories describing and explaining maladaptive behaviors and application of nursing interventions in a variety of treatment modalities.

452. Basic Concepts in Critical Care Nursing (5) I, II

Three lectures and six hours of laboratory.

Prerequisites: Nursing 414 and 416; concurrent registration in Nursing 453, 458, and 460.

Theory and selected laboratory experience in care of clients with complex health problems requiring intensive nursing care. Consideration given to student's preference for specific clinical area of concentration.

453. Basic EKG Monitoring (1) I, II Cr/NC

Prerequisite recommended: Concurrent registration in Nursing 452.

Basic electrophysiological and interpretive concepts necessary for identification and management of supraventricular and ventricular rhythms.

454. Primary Health Care Nursing (5)

Three lectures and six hours of laboratory.

Prerequisites: Nursing 414 and 416; concurrent registration in Nursing 458 and 460.

Theory and selected laboratory experiences in primary health care settings. Implementation of expanded role of professional nurse in primary care. Major primary care health problems. Health monitoring, continuity of care, epidemiological concepts, risk appraisal, health teaching, counseling, motivation.

456. Clinical Pharmacology in Nursing Practice (3) I, II

Prerequisites: Nursing 252, 254; concurrent registration in Nursing 308, 314.

Major classifications of drugs; pharmacological and toxicological activity; clinical applications. Role of nurse in assessment, intervention, and patient education.

458. Nursing Management and Leadership (5)

Three lectures and six hours of laboratory.

Prerequisites: Nursing 414 and 416; concurrent registration in Nursing 460 and Nursing 452 or 454.

Theories and functions of nursing management and leadership within health care system. Economics of health care.

460. Professional Development (2)

Prerequisites: Nursing 414 and 416; concurrent registration in Nursing 458 and Nursing 452 or 454.

Preparation for professional role in nursing. Emphasis in socioeconomic, political, and legal aspects of nursing. Discussions of advocacy, ethics, and current issues.

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.

498. Cooperative Education Supervised Practice (2-6) Cr/NC

Seminar: Two hours biweekly. Clinical hours arranged by student and employer.

Prerequisite: Nursing 308.

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.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

500. Advanced Health Assessment and Health Promotion (4)

Three lectures and three hours of laboratory.

Prerequisite: Consent of graduate adviser.

Physical and psychosocial assessment techniques, health promotion strategies for select populations.

590. Pathophysiology in Adults and the Elderly (3)

Prerequisite: Consent of graduate adviser.

Physiologic alterations associated with acute and chronic illness in adults and the elderly as a basis for primary prevention and medical and nursing interventions.

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. Maximum credit of three units of 596 applicable to a master's degree. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

**GRADUATE COURSES
Refer to Bulletin of the Graduate Division.**

Nutrition

In the College of Professional Studies and Fine Arts
ences 351

OFFICE: Exercise and Nutritional Sci-

TELEPHONE: (619) 594-5541

Didactic Program in Dietetics is approved by
the American Dietetic Association.

Faculty

Emeritus: Boggs, Gunning, Stout
Chair: Carlson
Professors: Josephson, Spindler
Assistant Professors: Beshgetoor, Kern
Lecturers: Mosier, Robasciotti, Schultz

Offered by the Department of Exercise and Nutritional Sciences

Master of Science degree in nutritional sciences.
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 didactic program in foods and nutrition is approved by the American Dietetic Association (ADA) which allows student eligibility for membership in ADA and for postbaccalaureate dietetic internship or preprofessional practice programs. Students must be admitted to and complete satisfactorily a postbaccalaureate program and pass the ADA 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.

Foods and Nutrition Major

With the B.S. Degree in Applied Arts and Sciences
(Major Code: 13061)

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 101, 204, 205, 206, 207, 208; Accountancy 201; Biology 100, 100L, 210; Chemistry 100 (or 200 and 201), 130, 160 (except with 200 series); Economics 201 (or Statistics 250); Psychology 101; Sociology 101. (46-50 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 40 upper division units to include Nutrition 301, 302, 302L, 303, 404, 405, 406; Biology 336; Exercise and Nutritional Sciences 304, 314; the remaining 12 units selected with the approval of adviser from Nutrition 309, 482, 491, 510; Biology 321; Chemistry 361A, 361B, 567; Community Health Education 470; and Management 350 and 352 or Psychology 321. Biology 336 will also satisfy three units of the General Education requirement in Explorations IV.A. Natural Sciences.

Courses

LOWER DIVISION COURSES

101. Professional Issues: Foods and Nutrition (1) I, II

Philosophical basis of foods and nutrition and relations of its specialties to the field as a whole. (Formerly numbered Nutrition 221.)

107. Nutrition Today (3) I, II

Obtaining nutritional needs from a varied food supply.
Not open to foods and nutrition majors or students with credit in Nutrition 204.

202. Nutrition for Athletes (3)

Prerequisite recommended: Nutrition 107.
Review of basic diet which will provide nutritional adequacy. Analysis of current theories and practices related to nutrition and athletic performance.

204. Fundamentals of Nutrition (3) I, II

Prerequisites: Biology 100, 100L; Chemistry 100 and 130, or 200 and 201. **Proof of completion of prerequisites required:** Copy of transcript.

Nutrition as applied to the stages of the normal life cycle.

205. Food Preparation (5) I, II

Three lectures and six hours of laboratory.
Prerequisites: Grade of C or better in Nutrition 101 and Chemistry 100 and 130 or 200, 201 and concurrent registration in Chemistry 231. **Proof of completion of prerequisites required:** Copy of transcript.
Composition, preparation, preservation, sensory and consumer evaluation of foods.

206. Cultural Aspects of Foods and Nutrition (2) I

Social, psychological, technological, religious, and health value systems that determine food habits. Food habits of ethnic and regional groups and associated nutritional problems.

207. Data Processing in Foods and Nutrition (3) I, II

Two lectures and two hours of activity.
Prerequisite: Concurrent registration in Nutrition 204 or 205.
Computer application in food service management, diet planning, and analysis.

208. Nutrition Throughout the Life Cycle (2) II

Prerequisite: Nutrition 204.

Nutritive needs of humans at the fetal, infant, child, adolescent, adult, and older adult stages of life. Factors which alter nutrient needs or intake at each stage. Strategies to enable nutritive needs to be met.

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)**

301. Science of Foods (3) I, II

Prerequisites: Nutrition 205 and Biology 210. **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.

302. Advanced Nutrition (3) I, II

Prerequisites: Nutrition 204, 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.

302L. Advanced Nutrition Laboratory (2) I, II

Six hours of laboratory.

Prerequisites: Nutrition 204, 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.

303. Quantity Food Production (3) I, II

Two lectures and three hours of laboratory.

Prerequisite: Nutrition 205.

Application and evaluation of techniques and equipment utilized in food service operations for quality and financial control, production, distribution and service of food.

309. Eating Disorders and Weight Control (2) Cr/NC I, II

Prerequisite: Upper division standing in foods and nutrition or kinesiology or other majors with consent of instructor.

Obesity and other eating disorders. Review of etiology, incidence, socioeconomic influences, pathogenesis and treatments. Treatment techniques practiced include modification of diet, activity and behavior. Of interest to those wishing to do weight control counseling.

311. Nutrition for Health and Fitness (3) I, II

Prerequisites: Biology 100, 212, and Chemistry 100.

Food choices for health contrasted with food fads and eating problems. Nutrition labeling, metabolic roles of nutrients, nutrient needs related to exercise and stage of life, professional and legal concerns with dietetics for allied health fields. May not be used toward a degree in foods and nutrition.

388. Dietetic Practice I (1)

Prerequisites: Nutrition 204, 205, and consent of instructor.

Practical experience in food service and medical nutritional therapy for future dietitians.

404. Food Systems Management (3) I, II

Prerequisite: Nutrition 303.

Managerial functions in food service systems.

405. Experimental Food Science (3) I, II

One lecture and six hours of laboratory.

Prerequisite: Nutrition 301. **Proof of completion of prerequisite required:** Copy of transcript.

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.

406. Diet Therapy (4) I, II

Prerequisites: Nutrition 302 and 302L. **Proof of completion of prerequisites required:** Copy of transcript.

Dietary management of pathological and debilitating diseases.

482. Educational Practices and Instructional Resources (3) I, II

Prerequisite: Fifteen units in nutrition.

Principles of learning as they relate to teaching foods and nutrition to adults. Organization of material; selection, use and evaluation of teaching techniques.

488. Dietetic Practice II (1)

Prerequisites: Nutrition 302, 303, 388, and consent of instructor.

Advanced practical experience in food service and medical nutrition therapy for future dietitians.

491. Research Literature in Foods and Nutrition (1)

Prerequisites: Nutrition 301, 302, 302L, and consent of instructor.

Current research topics in food science and nutrition.

496. Experimental Topics (1-4) I, II

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.

499. Special Study (1-3) I, II, S

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

510. Nutrition and Community Health (3) I, II

Two lectures and three hours of activity.

Prerequisites: Nutrition 302 and 302L.

Nutritional problems in the community with consideration of their resolution. Field placement experience required.

596. Advanced Studies in Nutrition (1-6)

Prerequisite: Nine upper division units in nutrition.

Advanced study of selected topics. 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 either the bachelor's or master's degree. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

**GRADUATE COURSES
Refer to Bulletin of the Graduate Division.**

Oceanography

Administered by the Dean of the College of Sciences

OFFICE: Life Sciences Annex
TELEPHONE: (619) 594-5142
WWW: <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, Economics, Civil and Environmental Engineering, Geography, Geological Sciences, Mechanical Engineering, Natural Science, 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, Chemistry, and Geological Sciences. Advanced coursework and research in geological and physical oceanography are conducted in the Geological Sciences Department. An option in marine geology is offered as part of the undergraduate major in geological sciences, and the Chemistry Department offers work in chemical oceanography. 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 the Coastal and Marine Institute. (See section of this catalog on Academic Organization, College of Sciences Research Centers.)

Oceanography Minor

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 Biology 515 or 517; Geological Sciences 540, 545; Oceanography 541.

The oceanography minor is intended for students with extensive background in the sciences. Oceanography 320 is not applicable toward the oceanography 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

UPPER DIVISION COURSES (Intended for Undergraduates)

305. Scientific Scuba Diving (3)

Two lectures and three hours of laboratory.

Prerequisites: Upper division standing. Swimming competency evaluation, physical examination approval for scuba diving, waiver for scuba diving.

Entry level scientific diver training and certification course. Theory and practical diving skills to include diving physiology, hyperbaric conditions, medical hazards, proper selection, care and operation of diving equipment, marine environment, emergency procedures, scientific diving techniques and regulations. Not open to students with credit in Oceanography 306, Biology 460 or Exercise and Nutritional Sciences 320, 323, 324.

306. Scientific Scuba Diving for Certified Divers (3)

Two lectures and three hours of laboratory.

Prerequisites: Oceanography 305 and Advanced or Scientific Diving Certification, diving skills proficiency evaluation, acceptable open-water diving equipment, physical examination approval for scuba diving, waiver for scuba diving.

Scientific diving operations, techniques and procedures; dive planning and lead diver responsibilities; underwater work, mapping, search and salvage, navigation, deep, night and small boat diving; emergency procedures and rescue. Physics, physiology, medicine, decompression theory, oceanography, marine life and marine environment. Master Diver Certification. Not open to students with credit in Biology 460 or Exercise and Nutritional Sciences 324.

320. The Oceans (3) I, II

Prerequisites: One introductory college course in a life science and one in a physical science, and completion of the General Education requirement in Foundations II.A., Natural Sciences and Quantitative Reasoning.

Biological, chemical, geological, and physical aspects of the oceans and their significance to humans; problems of modern oceanography.

496. Experimental Topics (1-4)

Selected topics. May be repeated with new content. See Class Schedule for specific content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

UPPER DIVISION COURSES (Also Acceptable for Advanced Degrees)

541. Oceanography (3)

Prerequisites: Biology 201, 202; Mathematics 121 and 122 or 150; Physics 180A or 195.

Multidisciplinary examination of physical, chemical, biological and geological aspects of marine environment and relationship of humans with the sea. Intended for science majors only.

561. Deep Sea Oceanography (3)

Prerequisites: Biology 515 and Chemistry 365.

Concepts of deep sea oceanography including abyssal biology, physics and chemistry, instruments and methods of deep sea research, biogeochemistry of oceanic ridges, and high-pressure biochemistry.

For additional courses in Marine Studies see:

Biology 513. Marine Microbiology
Biology 515. Marine Invertebrate Biology
Biology 517. Marine Ecology
Biology 519. Aquaculture
Biology 520. Ichthyology
Economics 454. Economics of the Ocean
Geography 504. Coastal and Submarine Physiography
Geography 510. Advanced Meteorology
Geography 588. Intermediate Remote Sensing of Environment
Geological Sciences 540. Marine Geology
Geological Sciences 545. Descriptive Physical Oceanography

Philosophy

In the College of Arts and Letters

OFFICE: Adams Humanities 4142
TELEPHONE: (619) 594-5263

Faculty

Emeritus: Friedman, Howard, McClurg, Nelson, O'Reilly, Ruja, Shields, Snyder, Warren, Weissman
Chair: Weston
Professors: Feenberg, Rosenstein, Weber, Weston
Associate Professors: Chaffin, Troxell
Assistant Professors: Barbone, Corlett, Francescotti, Wheeler

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.

Philosophy Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 15091)

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 including either Philosophy 110 or 120.

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or English 508W or Rhetoric and Writing Studies 305W or 500W with a grade of C (2.0) or better.

Major. A minimum of 30 upper division units in philosophy at the 400- and 500-level to include Philosophy 411, 412, 413, 414, and 521. Requirements in any one of the four areas of specialization, as listed below, must be completed along with three to six units of electives in philosophy.

A. Current Issues: Twelve units to include three units from each of the following groups, with an additional three units from either Group I or Group II.

Group I: Philosophy 523, 525, 532, 535, 537

Group II: Philosophy 510, 512, 528, 541

Group III: Philosophy 506, 507, 508, 543

B. Aesthetics and Philosophy of Literature: Nine units selected from Philosophy 508, 541, 542, and 543.

C. Legal and Political Philosophy: Philosophy 510, 512, and three units selected from Philosophy 523, 527, 528, 532.

D. Philosophy of Science: Philosophy 537 and six units selected from Philosophy 523, 531, and 536.

Philosophy Minor

The minor in philosophy consists of a minimum of 15-18 upper division units in philosophy. The student must complete the requirements in one of the following areas of specialization:

A. Aesthetics and Philosophy of Literature: Fifteen units to include 12 units selected from Philosophy 334, 508, 541, 542, 543; and three units of electives.

B. Applied Ethics: Eighteen units to include Philosophy 528 and 12 units selected from Philosophy 329, 330, 332, 333, 512; and three units selected from any upper division course in Philosophy or from Communication 500, 589, International Security and Conflict Resolution 310, Management 356, or Natural Science 333.

C. History of Philosophy: Fifteen units to include Philosophy 411 and nine units selected from Philosophy 412, 413, 414, 506, 507, 575; and three units of electives.

D. Legal and Political Philosophy: Fifteen units to include Philosophy 510, 512, six units selected from Philosophy 333, 528, 532, and three units of electives.

E. Philosophy and Cognitive Science: Fifteen units to include Philosophy 521, 523, 531, 536; and three units of electives.

F. Philosophy of Science: Fifteen units to include Philosophy 521, 523, 537, and six units of electives.

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

LOWER DIVISION COURSES

101. Introduction to Philosophy: Values (3) I, II (CAN PHIL 4)

Introduction to philosophical inquiry, with emphasis on problems of value. Students are encouraged to think independently and formulate their own tentative conclusions.

102. Introduction to Philosophy: Knowledge and Reality (3) I, II

Introduction to philosophical inquiry with emphasis on problems of knowledge and reality. Students are encouraged to think independently and formulate their own tentative conclusions.

103. Historical Introduction to Philosophy (3) I, II

Introduction to philosophical inquiry through study of the works of major philosophers in their historical contexts.

110. Critical Thinking and Composition (3)

Prerequisites: Satisfaction of the English Placement Test and Writing Competency requirements and Africana Studies 120 or Chicana or Chicano Studies 111B or Linguistics 100 or Rhetoric and Writing Studies 100. **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.

120. Introduction to Logic (3) I, II

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.

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)

Students taking 300-level courses for the major will be required to do extra work to be arranged with the instructor.

305. Classics of Western Philosophy (3)

Prerequisites: Upper division standing, and completion of the General Education requirement in Foundations 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.

310. Philosophy and Human Nature (3)

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

Concept of human nature. Descriptive and normative aspects of major theories of human nature.

329. Social Ethics (3)

Prerequisite: Completion of the General Education requirement in Foundations 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.

330. Medical Ethics (3)

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

Value judgments upon which medicine is based and the ethical issues which medicine faces.

332. Environmental Ethics (3)

Prerequisite: Completion of General Education requirement in Foundations 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.

333. Philosophy of Technology (3)

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

Nature of technology. Ethical aspects of social, political, and environmental problems associated with rapid development of technology over the last century. Responses to these problems by contemporary philosophers.

334. Philosophy of Literature (3)

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

Study of literature of philosophical significance, and of philosophical problems of literature.

351. Chinese Philosophy (3)

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

Philosophical traditions which have shaped the intellectual life and culture of China. Emphasis on foundational texts surviving from pre-Han China.

411. Ancient Western Philosophy (3) I

Prerequisite: Three units in philosophy.

Ancient western philosophy through the third century A.D.

412. Medieval and Renaissance Philosophy (3) II

Prerequisite: Three units in philosophy.

European philosophy from the fourth century through the sixteenth century.

413. Seventeenth and Eighteenth Century European Philosophy (3) I

Prerequisite: Three units in philosophy.

European philosophy in the seventeenth and eighteenth centuries.

414. Nineteenth Century European Philosophy (3) II

Prerequisite: Three units in philosophy.

European philosophy in the nineteenth century.

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.

499. Special Study (1-3) I, II

Prerequisites: Six upper division units in philosophy and prior arrangements with a supervising instructor.

Individual study. Maximum credit six units.

UPPER DIVISION COURSES (Also Acceptable for Advanced Degrees)

506. Twentieth Century Continental Philosophy (3)

Prerequisite: Six upper division units in philosophy.

Major figures and movements in European philosophy from Husserl to the present.

507. Twentieth Century Anglo-American Philosophy (3)

Prerequisite: Six upper division units in philosophy.

Major movements, issues, or figures of twentieth century Anglo-American philosophy. Course may be repeated with new content. Maximum credit six units.

508. Existentialism (3)

Prerequisite: Six units in philosophy.

The philosophical aspects of existentialism. Major emphasis is on the diversity of thought within a common approach as this is shown in individual thinkers.

510. Philosophy of Law (3)

Prerequisites: Three units in philosophy and three units in political science.

The nature of law and the logic of legal reasoning. An exploration of certain key legal concepts such as causation, responsibility, personality, and property.

512. Political Philosophy (3)

Prerequisite: Philosophy 101, 102 or 103.

Selected aspects of the political structures within which we live, such as law, power, sovereignty, justice, liberty, welfare.

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.

523. Theory of Knowledge (3)

Prerequisite: Six units in philosophy.

The major theories of human knowledge: mysticism, rationalism, empiricism, pragmatism.

525. Metaphysics (3)

Prerequisite: Six units in philosophy.

Prominent theories of reality, e.g., realism and nominalism, materialism and idealism, teleology and determinism.

528. Theory of Ethics (3)

Prerequisite: Six units in philosophy.

Significant and typical value theories and systems and the concrete problems such theories seek to explain. Emphasis will be on moral values.

531. Philosophy of Language (3)

Prerequisite: Six units in philosophy.

An introduction to theories of meaning for natural languages and formal systems; concepts of truth, synonymy and analyticity; related epistemological and ontological problems.

532. Philosophy of History (3)

Prerequisite: Six units in philosophy.

The nature of history and historical inquiry. As metaphysics: A study of theories of historical development. As methodology: History as science, truth and fact in history, historical objectivity, the purpose of history.

535. Philosophy of Religion (3)

Prerequisite: Six units in philosophy.

Philosophical examination of issues raised by the religious impulse in man.

536. Philosophy of Mind (3)

Prerequisite: Three upper division units in philosophy.

Analysis of the concept of mind, intention, behavior, etc. Developments generated by works of such philosophers as Wittgenstein, Wisdom, and Ryle.

537. Philosophy of Science (3)

Prerequisite: Six units in philosophy.

The basic concepts and methods underlying contemporary scientific thought. Contributions of the special sciences to a view of the universe as a whole.

541. History of Aesthetics (3)

Prerequisite: Philosophy 101, 102 or 103.

Major documents in the history of aesthetics.

542. Philosophy of Art (3)

Prerequisite: Six units in philosophy.

The nature of aesthetic experience. Principal contemporary theories of art in relation to actual artistic production and to the function of art in society.

543. Philosophy and Literary Theory (3)

Prerequisites: Three upper division units in philosophy and three upper division units in literature.

Relations between philosophy and literary discourse. Strategies of interpretation offered by major contemporary thinkers.

575. A Major Philosopher (3)

Prerequisite: Six upper division units in philosophy.

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.

596. Selected Topics (3)

Prerequisite: Six upper division units in philosophy.

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 six units of 596 applicable to the major in philosophy. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

599. Special Study (1-3)

Prerequisite: Upper division or graduate standing and consent of instructor.

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 Bulletin of the Graduate Division.

Physical Education

Refer to "Exercise and Nutritional Sciences" in this section of the catalog.

Physics

In the College of Sciences

OFFICE: Physics 131
TELEPHONE: (619) 594-6240

Faculty

Emeritus: Cottrell, Day, Feher, Garrison, Moe, Nichols, Smith, Teasdale, Wolter
Chair: Lilly
Professors: Burnett, Davis, Goldberg, Lilly, Morris, Oseroff, Papin, Pischerchio, Rehfuß, Roeder, Shore, Sweedler, Templin, Torikachvili
Associate Professor: Wallace
Assistant Professor: Boninsegni
Lecturers: Ferguson, Shackelford
Adjunct: Carlson, Mueller

Offered by the Department

Master of Arts degree in physics.
Master of Science degree in physics.
Master of Science degree in radiological health physics.
Major in chemical physics with the B.S. degree in applied arts and sciences.
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.
Minor in physics.

The Major

The study of physics is considered the center 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.

Physics graduates may also enter a wide variety of graduate programs. For example, a radiological health physics master's degree qualifies students for employment with the Environmental Protection Agency, nuclear power stations, government laboratories, hospitals, Department of Energy, and the Nuclear Regulatory Commission.

Chemical Physics Major

With the B.S. Degree in Applied Arts and Sciences
(Major Code: 19081)

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 stu-

dent are filed with the physics and chemistry undergraduate advisers and the Office of Admissions and Records.

A minor is not required with this major.

Preparation for the Major. Physics 195, 195L, 196, 196L, 197, 197L; Chemistry 200, 201, 231, 251; Mathematics 150, 151, and 252. (44 units)

Recommended: A course in computer programming.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 45 upper division units to include Physics 311, 350, 354A-354B, 357, 400A-400B; Chemistry 410A-410B, 431, 457, 520A, 550; Mathematics 342A-342B.

Physics Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 19021)

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 Admissions and Records. 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, 201; Computer Science 106; Mathematics 150, 151, 252. (38 units)

Foreign Language Requirement. Competency (successfully completing the third college semester or fifth college quarter) is required in one foreign language as part of the preparation for the major. Refer to the section of this catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 33 upper division units to include Physics 311, 317, 350, 354A-354B, 357, 400A-400B, 460; 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 Admissions and Records.

A minor is not required with this major.

Preparation for the major and the major consist of basic requirements in the lower and upper division for all students plus additional upper division requirements in one of the following areas: (a) Computational Physics; (b) Condensed Matter; (c) Foundations; (d) Modern Optics; (e) Scientific Instrumentation.

Basic Requirements for all Students

Preparation for the Major. Physics 195, 195L, 196, 196L, 197, 197L; Chemistry 200, 201; Computer Science 106; Mathematics 150, 151, and 252. (38 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 42-45 upper division units to include Physics 311, 317, 350, 354A-354B, 357, 400A-400B, 460, 498A, 498B; Mathematics 342A, 342B.

Areas of Specialization

In addition to the basic requirements, the student must complete the requirements in one of the following areas:

(a) Computational Physics

Required: Physics 516, 580, and Computer Science 575 or Mathematics 541.

Recommended: Computer Science 205.

(b) Condensed Matter

Required: Physics 510, 532, 533.

Recommended: Physics 534.

(c) Foundations

Required: Physics 510 and a minimum of six units selected from Physics 406, 532, 542, and 564.

(d) Modern Optics

Required: Physics 406, 552, 553.

Recommended: Physics 516, 532, 554.

(e) Scientific Instrumentation

Required: Physics 513, 516.

Physics Minor

The minor in physics consists of a minimum of 15 units in physics to include 12 upper division units in physics (excluding Physics 301 and 305). Courses selected must follow an integrated and coherent pattern of coursework. Courses must be approved by the Physics Department undergraduate adviser and be selected from one of the following areas:

Condensed Matter
Computational Physics
Foundations of Physics
Modern Optics
Radiological Physics
Scientific Instrumentation

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

LOWER DIVISION COURSES

Maximum credit 12 units for any combination of Physics 103, 107, 170, 180A-180B, 182A-182B, 195, 195L, 196, 196L, 197, 197L, 201.

103. Conceptual Physics (3)

Physics as natural philosophy. How physical theories grow and change through interaction with experiment. Holography, black holes, fusion, acoustics, lasers, and other topics form a framework through which the laws of physics and their philosophical and historical foundations are explored.

107. Introductory Physics with Laboratory (4) I, II

Three lectures and three hours of laboratory.

How physics concepts describe everyday events, and frontier phenomena. Classical mechanics, thermodynamics, electromagnetism, and selected topics from atomic, relativistic, and radioactivity physics. Not open to students with credit in Physics 180A or 195.

149. Special Study (1-2) Cr/NC I, II

Prerequisite: Consent of supervising instructor.

Individual study and laboratory work in area of student's major interest. Students will be assigned a member of the staff who will supervise their work. Maximum credit two units.

170. Preparation for Physics (3)

Prerequisite: Two years of high school algebra.

Elemental principles of physics approached from problem-solving and critical thinking perspectives necessary for success in Physics 180A and Physics 195. Not open to students with credit in Physics 107, 180A, or 195.

180A-180B. Fundamentals of Physics (3-3) I, II

Prerequisite: Satisfaction of the Entry-Level Mathematics requirement and qualification on the Mathematics Departmental Placement Examination, Part IA. Physics 180A is prerequisite to 180B.

Recommended: For Physics 180A, concurrent registration in Physics 182A; for Physics 180B, concurrent registration in Physics 182B.

Semester I: Mechanics, wave motion, sound, and fluids. Semester II: Electricity, magnetism, optics, and modern physics. Presented in a two-semester algebra/trigonometry based sequence. Physics 180A not open to students with credit in Physics 195. Physics 180B not open to students with credit in Physics 196.

182A-182B. Physical Measurements (1-1) I, II

Three hours of laboratory.

Prerequisite for 182A: Credit or concurrent registration in Physics 180A.

Prerequisite for 182B: Credit or concurrent registration in Physics 180B.

A laboratory course to accompany Physics 180A-180B. Semester I: Properties of matter, mechanics, sound, and wave motion. Semester II: Electricity, DC circuits, oscilloscope measurement techniques, electric and magnetic fields, and optics. 182A: Not open to students with credit in Physics 195L. 182B: Not open to students with credit in Physics 196L.

195. Principles of Physics (3) I, II

(195 + 195L: CAN PHYS 8)

(195 + 195L + 196 + 196L + 197 + 197L: CAN PHYS SEQ B)

Prerequisites: High school physics or a grade of C or better in Physics 170. Credit or concurrent registration in Mathematics 150.

Fundamental principles of physics in areas of mechanics and oscillatory motion. Designed for students requiring calculus-based physics.

195L. Principles of Physics Laboratory (1) I, II

(195 + 195L: CAN PHYS 8)

(195 + 195L + 196 + 196L + 197 + 197L: CAN PHYS SEQ B)

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.

196. Principles of Physics (3) I, II

(196 + 196L: CAN PHYS 12)

(195 + 195L + 196 + 196L + 197 + 197L: CAN PHYS SEQ B)

Prerequisites: Physics 195, credit or concurrent registration in Mathematics 151.

Fundamental principles of physics in areas of electricity and magnetism. Designed for students requiring calculus-based physics.

196L. Principles of Physics Laboratory (1) I, II

(196 + 196L: CAN PHYS 12)

(195 + 195L + 196 + 196L + 197 + 197L: CAN PHYS SEQ B)

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.

197. Principles of Physics (3) I, II

(197 + 197L: CAN PHYS 14)

(195 + 195L + 196 + 196L + 197 + 197L: CAN PHYS SEQ B)

Prerequisites: Physics 196; credit or concurrent registration in Mathematics 252.

Fundamental principles of physics in areas of wave motion, sound, electromagnetic waves, optics, relativity, and modern physics. Designed for students requiring calculus-based physics.

197L. Principles of Physics Laboratory (1) I,II

(197 + 197L: CAN PHYS 14)

(195 + 195L + 196 + 196L + 197 + 197L: CAN PHYS SEQ B)

Three hours of laboratory.

Prerequisite: Credit or concurrent registration in Physics 197.

Experiments in optics, lasers, holography, and nuclear counting.

201. Physics of Sound, Hearing, and Speech (4)

Three lectures and three hours of laboratory.

Prerequisite: Qualification on the Mathematics Departmental Placement Examination, Part IA.

Fundamental nature of sound and applications to hearing and speech.

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)**

301. Energy and the Environment (3)

Prerequisite: Completion of the General Education requirements in Communication and Critical Thinking and Foundations II.A., Natural Sciences and Quantitative Reasoning.

Fundamental physical concepts underlying energy, its conversion, and impact on the environment.

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.

317. Introduction to Computational Physics (2)

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.

333. Physics Perspectives (3)

Prerequisite: Physics 180B or 197.

Theoretical physics emphasizing basic themes cutting across separate traditional subject divisions. Visualize three-dimensional vector fields, forces and torques. Balance between derivations, conceptual understanding, numerical problem-solving, estimations, and proportional reasoning.

350. Classical Mechanics (3)

Prerequisites: Physics 197, 197L and credit or concurrent registration in Mathematics 342A.

Newtonian mechanics, wave motion, Lagrange's equations, Hamilton's equations, generalized coordinates, normal coordinates, small oscillations, special theory of relativity.

354A-354B. Modern Physics (3-3)

Prerequisites: Physics 354A: Physics 197, 197L and credit or concurrent registration in Mathematics 342A. Physics 354B: Physics 354A and credit or concurrent registration in Mathematics 342B.

Semester I: Atomic theory of matter, introduction to quantum theory with applications to atomic structure. Semester II: Atomic theory, periodic table, techniques of quantum mechanics. Applications of quantum mechanics to solid state and nuclear physics.

357. Advanced Physical Measurements (3)

One lecture and six hours of laboratory.

Prerequisites: Physics 197, 197L, 311, and credit or concurrent registration in Physics 354B.

Stresses both laboratory experiments and techniques of data and error analysis. Experiments are taken from major areas of physics.

400A-400B. Classical Electromagnetism (3-3)

Prerequisites: Physics 400A: Physics 197, 197L and credit or concurrent registration in Mathematics 342B. Physics 400B: Physics 400A.

Electrostatics, magnetostatics, electromagnetic induction, Maxwell's equations, radiation and wave propagation.

406. Optics (3)

Prerequisites: Physics 197, 197L; Mathematics 342A.

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.

460. Thermal Physics (3)

Prerequisite: Physics 354A.

Classical thermodynamics and statistical mechanics. Applications of equilibrium thermodynamics. Introduction to 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.

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.

498A. Senior Research (1) Cr/NC

One discussion period and two additional hours per week to be arranged.

Prerequisite: Senior standing in physics and an acceptable plan for graduation within one year.

Selection and design of individual research project. Oral and written progress reports.

498B. Senior Research (2)

Two discussion periods and four additional hours per week to be arranged.

Prerequisites: Physics 357 and 498A.

Laboratory work, progress reports, oral and written final reports.

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)

510. Quantum Mechanics (3)

Prerequisites: Physics 350, 354B, and Mathematics 342B.

Mathematical and physical foundations of quantum theory in terms of wave and matrix mechanics. Applications to properties of atoms and solids.

513. Electronic Instrumentation (3)

One lecture and six hours of laboratory.

Prerequisites: Physics 311. Recommended: Credit or concurrent registration in Physics 516.

Computer data acquisition and control, modern signal detection and enhancement techniques; transducer principles and applications; noise and the enhancement of the signal-to-noise ratio.

516. Theory of Scientific Instrumentation (3)

Prerequisites: Physics 311 and Mathematics 342B.

Fourier analysis with applications to scientific instrumentation, spectroscopy, and image processing; Z transforms and digital filtering; detection systems and their optimization of the signal-to-noise ratio.

532. Solid State Physics (3)

Prerequisites: Physics 350, 354B, and Mathematics 342B.

Elastic, thermal, electric, magnetic and optical properties of solids. Introduction to the energy band theory of solids, with applications to semiconductors and metals.

533. Experimental Techniques in Condensed Matter Physics (3)

One lecture and six hours of laboratory.

Prerequisites: Physics 357 and credit or concurrent registration in Physics 532.

Experiments in various fields of condensed matter such as x-ray diffraction, Hall effect, superconductivity, and electron paramagnetic resonance.

534. Colloquium in Condensed Matter Physics (1) Cr/NC

Prerequisite: Credit or concurrent registration in Physics 532.

Student and faculty research project presentations. Maximum credit three units.

542. Acoustics (3)

Prerequisites: Physics 350 and Mathematics 342B.

Wave motion, production, reception, transmission and analysis of sound. Special applications such as environmental noise, underwater and seismic waves.

552. Modern Optics and Lasers (3)

Prerequisites: Physics 406 with minimum grade of C; credit or concurrent registration in Physics 400B; Mathematics 342B.

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.

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.

554. Colloquium in Optics Research (1) Cr/NC

Prerequisites: Concurrent registration in Physics 498A or 498B or 797 and consent of instructor.

Student and faculty research project presentations. Maximum credit three units.

560. Radiological Physics and Dosimetry (3)

Prerequisite: Credit or concurrent registration in Physics 354A.

Ionizing radiation fields, interactions of radiation with matter, cavity theory, external radiation dosimetry.

561. Nuclear Instrumentation (3)

Two lectures and three hours of laboratory.

Prerequisites: Credit or concurrent registration in Physics 311 and 560.

Electronics of nuclear instrumentation. Radiation detection and measurement using ionization chambers, GM and proportional counters, and scintillation dosimetry.

564. Nuclear and Elementary Particle Physics (3)

Prerequisite: Physics 354B.

Nuclear and elementary particle phenomena including nuclear structure of reactions, nuclear devices, elementary particle symmetry and structure, and experimental methods.

570. Relativity (3)

Prerequisites: Physics 354A, 400B, and Mathematics 342B.

Relative coordinates, Lorentz transformation, covariant formation of the laws of physics, applications of special relativity, introduction to curved space time, cosmology.

580. Computational Physics (3)

Prerequisites: Physics 354B, Computer Science 106, Mathematics 342B, 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.

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. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

Policy Studies in Language and Cross-Cultural Education

In the College of Education

OFFICE: Education 152
TELEPHONE: (619) 594-5155
FAX: (619) 594-1183

Accredited by the California Commission on Teacher Credentialing.

Faculty

Chair: Ochoa
Professors: Espinosa, Kuhlman, Ochoa, Pacheco
Associate Professor: Young
Assistant Professor: Jones
Lecturer: Alfaro

Offered by the Department

Master of Arts degree in education.

Multiple subject bilingual cross-cultural language and academic development credential (B/CLAD) emphasis: Spanish.

Single subject bilingual cross-cultural language and academic development credential (B/CLAD) emphasis: Spanish.

Cross-cultural language and academic development (CLAD) certificate.

The Major

The Policy Studies Department offers programs leading toward the Bilingual Cross-Cultural Language and Academic Development (B/CLAD) credential for single and multiple subject (secondary and elementary), as well as the more advanced CLAD Certificate.

With the passage of Proposition 227, requiring all students in public schools be taught in English unless a school has received a waiver, the Policy Studies Department and the College of Education remains committed to the training of teachers for the B/CLAD credentials. The B/CLAD credentials meet all of the requirements of the CLAD credential. The B/CLAD credential remains as the most desirable credential in California. Furthermore, the University is committed with 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.

Multiple Subject Bilingual Cross-Cultural Language and Academic Development Credential (B/CLAD) Emphasis: Spanish

(Credential Code: 00200)

The Multiple Subject Bilingual Cross-Cultural Language and Academic Development credential (B/CLAD) emphasis: Spanish credential is available to students interested in teaching in a bilingual 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 as well as English, candidates must pass the Spanish Language Proficiency and Cultural Awareness Examination given by the department.

Candidates who will pursue this credential need to specify "Spanish emphasis" in the application for admission to SDSU (Code: 00200). Applications for program admission are available from the Campus Store. Packet includes the following information:

Standards for Admission

- 1. CBEST.** Students must pass the California Basic Educational Skills Test prior to admission to the B/CLAD credential program. This examination is required by the Commission on Teacher Credentialing. Booklets containing registration forms and test information are available from the Test Office in SS-2549, (619) 594-5216. Call the PLC department for additional information on CBEST.
- 2. Major.** The Liberal Studies major, Emphasis in Education, Foreign Language Specialization may be selected in preparation for the teaching credential. Students who have academic majors other than liberal studies are required to pass the commission-approved PRAXIS, Multiple Subject Assessment for Teachers (MSAT). Candidates are urged to take this examination as early as possible. This is a prerequisite for admission into B/CLAD Multiple Subject program. These scores must have been received within five years prior to recommendation. Information may be obtained through advisers in the Policy Studies in Language and Cross-Cultural Education Department, ED-152, and registration materials are available through the Center for Careers in Education, ED-100.
- 3. Prerequisite Courses.**
Policy Studies in Language and Cross-Cultural
Education 515 3 units
Education 451 3 units
Exercise and Nutritional Sciences 241A, 241B 2 units
Linguistics 420* or 520 3 units
Linguistics 452* 3 units
Linguistics 550 or Policy Studies in Language and
Cross-Cultural Education 914 3 units
Mathematics 210** or 211 or 313 3 units
Art 100 or 101 or 387; Music 102 or 343; Theatre 100 or
120 or 310 or 315 3 units

* Linguistics 420 and 452 are requirements for the Liberal Studies major.

** With approval of the mathematics adviser, any of the following mathematics courses may be substituted for Mathematics 210: Mathematics 121, 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 Center for Careers in Education, ED-100. 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 60 hours of experience with students in typical elementary classroom settings within the last five 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 PLC 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. In lieu of the actual Certificate of Clearance or copy of a credential, candidates may submit their clearance application packets and fees to the Center for Careers in Education, ED-100.

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. Make appointment in ED-152, telephone (619) 594-5155.

11. Language and Culture Examination. All candidates must pass the PLC Department Spanish Language Proficiency and Cultural Awareness Examination prior to entering the credential program. Please call (619) 594-3218.

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 PLC Department Admissions and Retention Committee for individual consideration; petition forms must be submitted concurrently with the application packets.

14. Application. Applicants should complete application procedures the semester prior to beginning the credential program. Call the department for Policy Studies application deadline.

In addition to the minimum admissions standards identified above, the PLC 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.

	Program *	<i>Units</i>
PLC 901	Professional Portfolio I	1
PLC 902	Professional Portfolio II.....	1
PLC 910	Teaching Mathematics to Bilingual Elementary Students	3
PLC 911	Teaching Social Studies to Bilingual Elementary Students	2
PLC 912	Teaching Science to Bilingual Elementary Students	2
PLC 923	Psychological Foundations of Education and Bilingual Students	3
PLC 931	Skills in Teaching Reading to Bilingual Elementary Students	3
PLC 932	Teaching Spanish Language Arts to Bilingual Elementary Students	3
PLC 960	Student Teaching Seminar for Bilingual Elementary Students	3
PLC 961	Student Teaching for Bilingual Elementary Students	6
PLC 962	Student Teaching for Elementary Bilingual Students II	6

* Contact department for details.

Preliminary 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 Policy Studies in Language and Cross-Cultural Education for further information.)
3. Passage of PRAXIS Examination, Multiple Subject Assessment for Teachers (MSAT) or approved waiver program (Liberal Studies major, Emphasis in Education).
4. Passage of the Spanish Language Proficiency and Cultural Awareness Examination.
5. Demonstrated knowledge of principles and provisions of United States Constitution through successful completion of three-unit college level course or examination. Courses are listed in General Catalog section on "Graduation Requirements," IV. American Institutions Requirement, C.3.b.
6. Passage of California Basic Educational Skills Test (CBEST).
7. Passage of Reading Instruction Competence Assessment (RICA) Test.

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."*

Clear Credential Requirements

1. Completion of an approved fifth year program (a minimum of 30 upper division or graduate-level postbaccalaureate units).
2. Coursework/fieldwork to satisfy PL 94-142: Needs of, and methods of providing educational opportunities to individuals with exceptional needs (mainstreaming). (Teacher Education 526.)
3. Demonstrated knowledge of computer hardware, software, and applications to educational/classroom use (computer literacy): Educational Technology 470.
4. Knowledge of health education in California, including substance abuse and nutrition: CHE 101 or 320 and verification of CPR competency.

5. Candidates are required to verify cardiopulmonary resuscitation. The Professional Clear Multiple Subject credential is valid for five years and requires completion of a minimum of 150 hours of approved professional growth activities and 90 days of teaching-related activities in order to be renewed.

Single Subject Bilingual Cross-Cultural Language and Academic Development Credential (B/CLAD) Emphasis: Spanish

(Credential Code: 00100)

The Single Subject Bilingual Cross-Cultural Language and Academic Development (B/CLAD) Spanish emphasis is available for students interested in teaching in a bilingual 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 with (B/CLAD) Spanish emphasis" in the application for admission to SDSU (Code: 00100). Applications for program admission are available from Aztec Shops Campus Store. Packet includes the following information:

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 Commission on Teacher Credentialing. Booklets containing registration forms and test information are available from the Test Office in SS-2549, (619) 594-5216. Call the PLC department for additional information on CBEST.

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 PRAXIS/SSAT examinations, or a combination of coursework and examination scores. Competency will be assessed and verified by subject matter departments at SDSU. Requirements for the various single subject majors are listed with the academic majors in the *General Catalog*.

Test scores submitted for verification of subject matter competency are valid for five years from the date of the examination. Information and registration materials for the current PRAXIS examinations are available at the Center for Careers in Education, ED-100. Students who have completed approved waiver programs at other universities must still be assessed by SDSU subject matter departments prior to admission to this University's credential program.

3. Prerequisite Courses:

ED 451	Introduction to Multicultural Education	3 units
LING 420	Linguistics and English.....	3 units
PLC 400	The Secondary School and Bilingual Education	3 units
PLC 515	Bilingual Teaching Strategies	3 units

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 Center for Careers in Education, ED-100. 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 HMO's, or public health agencies.

7. **Early Field Experience.** Applicants must provide evidence of a minimum of 45 hours of experience with students in typical classroom settings within the last five 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 PLC 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. Submit clearance application packet and fees to Center for Careers in Education, ED-100.

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 ED-152, telephone (619) 594-5155.

11. **Language and Culture Examination.** All candidates must pass the Spanish Language Proficiency and Cultural Awareness Examination prior to entering the credential program. Please call (619) 594-3218.

12. **Appeals Process.** Candidates who do not meet all the admission requirements may petition the PLC Department Admissions and Retention Committee for individual consideration; petition forms must be submitted concurrently with the application packets.

13. **Application.** Applicants should complete application procedures the semester prior to beginning the credential program. Call the department for PLC application deadline.

In addition to the minimum admissions standards identified above, the PLC 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.

		Program	
Prerequisites			
ED 451	Introduction to Multicultural Education		3
PLC 400	The Secondary School and Bilingual Education		3
PLC 515	Bilingual Teaching Strategies		3
LING 420	Linguistics and English.....		3
First Semester			
PLC 924	Behavioral and Psychological Aspects of Teaching in the Bilingual Classroom		3
PLC 933	Skills in Teaching Reading to Bilingual Secondary Students.....		3
PLC 954	Humanistic and Social Aspects of Teaching in the Bilingual Classroom		3
PLC 963	Student Teaching for Bilingual Secondary Students I		4
LING 453	Language Issues in the Secondary School.....		3
TE 914	Teaching and Learning in the Content Area: Major		3
Second Semester			Units
PLC 903	Bilingual Secondary Student Teaching Seminar		3
PLC 914	Teaching and Learning in the Content Area: English Language Development/Spec. Des. Instr. in English		3
PLC 964	Student Teaching for Bilingual Secondary Students II		9-12

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 Department of Policy Studies in Language and Cross-Cultural Education for further information about the approved programs.)
3. MAJOR ADVISER'S RECOMMENDATION. Passage of subject matter examination(s) or waiver thereof through completion of one of the approved single subject credential majors listed below with a written recommendation from the Ryan major adviser.
 - Art: Art
 - Business: Accounting, Finance, Information Systems, Management, Marketing
 - English: Communication, Comparative Literature, English, Journalism, Linguistics, Theatre
 - Foreign Languages: Classics (Latin), French, German, Russian, Spanish
 - Science: Biology, Chemistry, Geological Sciences, Physical Science
 - Mathematics: Mathematics
 - Music: Music
 - Physical Education: Kinesiology (Specialization in Physical Education)
 - Social Science: Social Science

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, 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 Center for Careers in Education, ED-100, to clarify the appropriate means for satisfaction of the subject matter competency requirement.
4. Passage of the Spanish Language Proficiency and Cultural Awareness Examination.
 5. Demonstrated knowledge of principles and provisions of United States Constitution through successful completion of three-unit college level course or examination. Courses are listed in General Catalog section on "Graduation Requirements," IV. American Institutions Requirement, C.3.b.
 6. Passage of California Basic Educational Skills Test (CBEST).

NOTE: Undergraduate students in their final semester prior to obtaining a baccalaureate degree may sign up for concurrent postbaccalaureate credit as explained in this catalog.

Clear Credential Requirements

1. Completion of an approved fifth year program (a minimum of 30 upper division or graduate-level postbaccalaureate units).
2. Coursework/fieldwork to satisfy PL 94-142: Needs of, and methods of providing educational opportunities to individuals with exceptional needs (mainstreaming) (TE 526).
3. Demonstrated knowledge of computer hardware, software, and applications to education/classroom use (computer literacy): Educational Technology 470.
4. Knowledge of health education in California, including substance abuse and nutrition, Community Health Education 320 and verification of current CPR competency.
5. Candidates are required to verify cardiopulmonary resuscitation.

The professional Clear Multiple Subject credential is valid for five years and requires completion of a minimum of 150 hours of approved professional growth activities and 90 days of teaching-related activities in order to be renewed.

Cross-Cultural Language and Academic Development (CLAD) Certificate

The Cross-Cultural Language and Academic Development (CLAD) Certificate provides an interdisciplinary approach in linguistics and policy studies to prepare credentialed teachers in theory and application of English Language Development (ELD) and Specially Designed Academic Instruction in English (SDAIE) methodology for linguistically diverse students in grades K-12.

- A. Prerequisites: Linguistics 420 or 520.
- B. Certificate Requirements:
 1. Twelve units including: Policy Studies in Language and Cross-Cultural Studies 601, 602; Linguistics 552; Policy Studies in Language Cross-Cultural Studies 651* or 914 or Linguistics 550.
 2. Six units of foreign language at the college level or equivalent.
 3. Completion of program with a 3.0 grade point average.
- C. Candidates who hold valid basic K-12 teaching credentials will also be able to apply directly to the Commission on Teacher Credentialing for the state's CLAD Certificate for public school service.

Apply in the Policy Studies Department, ED 152, or call (619) 594-5155 for more information.

* Prerequisite waived for students in this certificate program.

Courses

UPPER DIVISION COURSES (Intended for Undergraduates)

397. Problems in Education (Credit to be arranged) I, II (Offered only in Extension)

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.

400. The Secondary School and Bilingual Education (3) II

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.

415. Fieldwork in Bilingual Community Context (3)

Two lectures and two hours of activity.

Prerequisite: Upper division standing.

Analysis of culturally and linguistically diverse school communities.

Participation in bilingual classrooms/schools in preparation for entering B/CLAD credential program.

496. Experimental Topics (1-4) I, II

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.

499. Special Study (1-3) I, II

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)

515. Bilingual Teaching Strategies (3)

Legal and historical context for bilingual education; bilingual program models and teaching strategies; language and academic assessment methods for grouping and evaluating bilingual students. Fieldwork required.

552. Teaching Writing in Multilingual Settings (3)

Methodologies in teaching primarily expository writing to students from various language backgrounds, focusing on skills such as those needed to avoid syntactic, semantic and stylistic language interference.

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.

596. Special Topics in Bilingual and Multicultural Education (1-3)

Prerequisite: Consent of instructor.

Selected topics in bilingual, cross-cultural education and policy studies. See Class Schedule for specific content. Maximum credit of six units of 596 applicable to a master's degree. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

Political Science

In the College of Arts and Letters

OFFICE: Nasatir Hall 127
TELEPHONE: (619) 594-6244
FAX: (619) 594-7302

Faculty

Emeritus: Andrain, Crain, Feierabend, Gripp, Hobbs, Janssen, Kahng, Little, Miles, Padgett
Chair: Lewin
Professors: Conniff, Heck, Hofstetter, Johns, Loveman, Schultze, Soule, Strand, Terrell
Associate Professors: Cutter, Fairlie, Keiser, Lewin
Assistant Professors: Carruthers, Kennedy

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.

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.

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 to the major.

Political Science Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 22071)

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 political science courses can apply to the degree.

Students majoring in political science must complete a minor in

another field.

Preparation for the Major. Political Science 101, 102, 103 and three units of either statistics or logic. (12 units)

See Political Science 201 for listing of courses in other departments that fulfill the statistics requirement.

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or History 430W, Linguistics 305W, Rhetoric and Writing Studies 305W or 500W, or Sociology 396W with a grade of C (2.0) or better.

Major. A minimum of 24 upper division units to include (a) three units in Political Science 495, 497 or 498, and (b) 21 upper division units in political science distributed among at least **four** of the fields listed below, provided that at least three units shall be taken in Field I.

Field I: Political Theory. Courses numbered 301A to 305, 406, and 515A-515B.

Field II: American Government and Politics. Courses numbered 321 to 338, 422 to 436, and 530 to 537.

Field III: Public Law. Courses numbered 346 to 348 and 454.

Field IV: Comparative Politics. Courses numbered 356 to 370 and 555 to 568.

Field V: International Politics. Courses numbered 375 to 393, 478 to 481, and 575 to 577.

Political Science Minor

The minor in political science consists of a minimum of 18 units in political science to include Political Science 101 and either 102 or 103; twelve of the 18 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):

- Political Theory (Field I)
- Politics and Public Law (Fields II and III)
- Comparative Politics and International Politics (Fields IV and V)

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

LOWER DIVISION COURSES

101. Introduction to Politics and the American Political System (3) I, II

Basic political concepts as applied to the American political system. The American political system as a constitutional democracy with reference to specific topics. When taken with Political Science 102 will satisfy graduation requirement in American Institutions.

102. Introduction to American and California Government and Politics (3) I, II

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. **Credit will not be allowed for both Political Science 102 and 320.**

103. Introduction to Comparative Government (3) I, II

Analytical models and techniques for examination of the problems of decision making and control in various political systems. Emphasis on patterns of political action in various cultural contexts.

201. Elementary Statistics for Political Science (3) I, II

Prerequisites: Course in intermediate algebra; Political Science 101 and 102; satisfaction of the Entry-Level Mathematics requirement.

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; Biology 215; Civil and Environmental Engineering 160; Economics 201; Psychology 270; Sociology 201; Statistics 119, 250.

227. Film and Politics (1) Cr/NC

Prerequisite recommended: Political Science 102.

Popular motion pictures analyzed from perspective of political content. Thematic implications concerning power, justice, social change, and revolution. Construction of alternative political realities present in popular media.

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)**

310. Politics and the Arts (3)

Prerequisites: Political Science 101 and 102.

The contribution of the artistic media to the activity and understanding of politics.

495. Internship in Local Politics (3) I, II

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 160 hours of fieldwork and periodic analytical essays.

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.

497. Investigation and Report (3) I, II

Prerequisite: Limited to senior political science majors.

Senior thesis. Analysis of special topics.

499. Special Study (1-3) I, II

Prerequisites: Twelve upper division units in political science and consent of the instructor.

Individual study. Maximum credit six units.

**UPPER DIVISION COURSE
(Also Acceptable for Advanced Degrees)**

596. Topics in Political Science (3)

Prerequisite: 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. Maximum credit of three units of 596 applicable to a master's degree. Maximum credit of six units of 596 applicable to a 30-unit master's degree.

Field I: Political Theory

**UPPER DIVISION COURSES
(Intended for Undergraduates)**

301A-301B. History of Western Political Thought (3-3)

Prerequisites: Completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors. Political Science 301A is prerequisite to 301B.

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. 301A emphasizes Plato, Aristotle, Augustine, Aquinas, and Marsilius of Padua. 301B stresses major political theorists such as Machiavelli, Hobbes, Locke, and Rousseau.

302. Modern Political Thought (3)

Prerequisite: Completion of the General Education requirement in Foundations 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.

305. American Political Thought (3)

The 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.

406. Democracy and Mass Society (3)

Origin and development of theories of democracy and application of democratic ideas to contemporary political life.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

515A-515B. Research Methods in Political Science (3-3)

Prerequisite: Political Science 201. Political Science 515A is prerequisite to 515B.

The research process, from research design through data processing, analysis and interpretation. Problems of application to election statistics, census data, roll call records, sample survey data and biographical information.

Field II: American Government and Politics

**UPPER DIVISION COURSES
(Intended for Undergraduates)**

320. American Institutions (3) I, II

The principles of the Constitution of the United States of America, and a survey of the political and social institutions which have developed under the Constitution. 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. Credit will not be allowed for both Political Science 102 and 320.

321. State Politics (3)

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.

334. Politics of the Environment (3)

Analysis of political process as it shapes environmental policy in a world characterized by finite resources. Emphasis on expanding national and international claims made upon these resources. May include a substantial amount of material about foreign political systems.

335. Public Policy (3)

Prerequisite: Political Science 101 and 102.

Theory and practice of process of formulating public policy; roles of administrators, legislators, courts, interest groups, and political parties; public agencies and public interest; case studies in formulating public policies. May include a substantial amount of material about foreign political systems.

338. The Legislative Process (3)

A detailed analysis of legislatures. Special attention will be devoted to the impact of dynamic factors on formal procedures. May include a substantial amount of material about foreign political systems.

422. Urban Politics (3)

Prerequisite: Political Science 101 or 102.

The processes by which social conflicts in American urban areas are represented and regulated. Urban political culture; ecology; group development and activity; power structures; and reform movements are surveyed. The character of the urban political "problem" and proposed solutions are evaluated. Meets graduation requirement in California state and local government. When taken with Political Science 305 or 320, will also satisfy all requirements in American Institutions.

425. Political Behavior (3)

Prerequisites: Political Science 102.

Social and attitudinal variables in political behavior. Quantitative research data as used in electoral studies. May include a substantial amount of material about foreign political systems.

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.

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.

498. Internship in National Politics (12) I, II

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. Maximum credit three units applicable to the major or minor in political science.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

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.

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.

537. The Politics of Bureaucracy (3)

Prerequisites: Political Science 101 and 102.

An analysis of the bureaucracy as an actor in the political system. May include a substantial amount of material about foreign political systems.

Field III: Public Law

**UPPER DIVISION COURSES
(Intended for Undergraduates)**

346. Law and the Political System (3)

Forces influencing the making of law; relationship between social and legal change; nature and limits of the judicial function.

347A-347B. American Constitutional Law (3-3)

Substantive principles of American constitutional law. Rights and liberties protected by the Constitution against action of federal and state governments. May include problems of judicial review, federal system, separation of powers, nature of selected congressional-presidential powers. Satisfies graduation requirement in United States Constitution. (Formerly numbered Political Science 547A-547B.)

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.

454. Special Problems in Public Law (3)

Prerequisites: Political Science 101 and 102, and three upper division units within Field III.

Exploration of selected issues in the field of law.

Field IV: Comparative Politics

**UPPER DIVISION COURSES
(Intended for Undergraduates)**

356. Governments of Continental Europe (3)

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

The political systems of countries of western continental Europe.

357. Government of England (3)

The structure and functioning of the English parliamentary system with emphasis on present-day political principles and parties.

359. Government and Politics of Russia and the Commonwealth (3)

Contemporary developments in Russia and states of former Soviet Union. Focus on Gorbachev era and post-Gorbachev transformations of political, economic, and social systems.

361. Governments and Politics of the Developing Areas (3)

Prerequisites: Political Science 101 or 103; and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors.

Internal political systems, governmental structures and the foreign policies of developing nations.

362. Governments and Politics of East Asia (3)

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

The internal political structure and foreign policies of China, Japan, and Korea.

363. Governments and Politics of the Middle East (3)

Prerequisite: Completion of the General Education requirement in Foundations 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.

364. Political Change in Modern Africa (3)

Dynamics of social and political change in modern Africa.

370. Political Violence (3)

Prerequisites: Political Science 101, 102 or 103; and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for non-majors.

Underlying conditions, expressions and consequences of violence within political systems.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

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.

560. Comparative Public Policy (3)

Prerequisite: Political Science 103 or 335.

Ways that political and social factors shape policy choices, implementation strategies, and policy outcomes in selected countries, emphasis on industrialized nations. Policy areas chosen from: education, health, nutrition, crime, transportation, housing, energy, population control, poverty, unemployment, inflation.

562. Government and Politics of Japan (3)

Prerequisite: Political Science 103 or 362.

Governmental structures, political processes, and public policies of Japanese political system. Recent political history and cultural factors which shape Japanese politics. Japanese foreign policies, especially the Japan-United States relationship.

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.

567. Political Systems of Latin America (3)

Prerequisite: Political Science 566.

Domestic and international politics of selected Latin American states.

568. The Mexican Political System (3)

Prerequisite: Political Science 101 or 103.

Principal factors in Mexican governmental decision making. Ideology, political groups, tactics of leaders and governmental structure.

Field V: International Politics

**UPPER DIVISION COURSES
(Intended for Undergraduates)**

375. International Relations (3)

Dynamics of conflict and cooperation among national, international and transnational actors; contributing political, economic, and social factors.

393. Institute on World Affairs (3)

Contemporary problems in international relations. See Class Schedule for specific content.

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.

479. National Security Policy (3)

Objectives, instruments, and consequences of national security policy.

481. International Relations of the Developing Nations (3)

Prerequisite: Six units of political science.

Cooperation and conflict between the developing nations and relations of such nations with the developed countries.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

575. International Relations of the Pacific Rim (3)

Prerequisite: Political Science 362 or 375 or 481.

Dynamics of conflict and cooperation among nations of the Pacific Rim. Stress on political and economics factors that shape interstate relations.

577. Principles of International Law (3)

The function of law in the international community. The historical development of the ideas and rules of international law and their place in the modern diplomatic and legal structure.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

Portuguese

In the College of Arts and Letters

OFFICE: Business Administration 403

TELEPHONE: (619) 594-6588

FAX: (619) 594-5293

Faculty

Chair: Higgs

Professor: Silverman

Offered by the Department of Spanish and Portuguese Languages and Literatures

Major in international business, with emphasis in Portuguese. *See* International Business.

Minor in Portuguese.

Portuguese Minor

The minor in Portuguese consists of a minimum of 15-17 units in Portuguese, six units of which must be in upper division courses. Recommended: History 552.

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.

Foreign Language Requirement for the B.A. Degree in Liberal Arts and Sciences

Students electing the study of Portuguese to fulfill the foreign 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 foreign 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, although students with fewer than three years of high school level language may complete the first semester college course for graduation credit.

2. The first *three years* of high school level language count as the equivalent of the first two college semesters, although students with fewer than four years of high school level language may complete the second semester college course for graduation credit. Students who have completed three years of foreign language in high school will not receive credit for the first semester college course unless at least five years separate the last high school course and the first college course.

3. *Four years* of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the foreign language requirement.

Courses

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.

101. Elementary/Intensive Portuguese I (5) I

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 who have completed three years of high school Portuguese unless the third course was completed five or more years ago.

201. Elementary/Intensive Portuguese II (5) II

Prerequisite: Portuguese 101.

Continuation of Portuguese 101.

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.

299. Special Study (1-3)

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

UPPER DIVISION COURSES

(Intended for Undergraduates)

All upper division courses in Portuguese are taught in Portuguese unless otherwise stated.

No credit will be given for lower division courses taken after successfully completing any upper division Portuguese course.

301. Intermediate Portuguese Grammar and Composition (3)

Prerequisites: Portuguese 201; and completion of the General Education requirement in Foundations II.C., Humanities required for non-majors.

Oral and written composition in Portuguese, based on models from modern Portuguese and Brazilian texts. Not open to students who have completed four years of high school Portuguese unless the fourth course was completed five or more years ago.

401. Advanced Portuguese Grammar and Composition (3)

Prerequisites: Portuguese 301; and completion of the General Education requirement in Foundations II.C., Humanities required for non-majors.

Oral and written composition in Portuguese, based on models from modern Portuguese and Brazilian texts.

443. Contemporary Luso-Brazilian Civilization (3)

Prerequisite: Portuguese 401.

Historical, cultural socioeconomic, ethnic, geographic, and political factors of modern Brazil and Portugal.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)

534. Portuguese Literature (3)

Prerequisite: Portuguese 401.

Important movements, authors and works in the literature of Portugal from its beginnings to the present.

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

Arts 212

OFFICE: Professional Studies and Fine

TELEPHONE: (619) 594-5124

Faculty

Faculty assigned to teach Professional Studies and Fine Arts courses are drawn from the Schools of Art, Design and Art History, Communication, Music and Dance, and the Department of Theatre.

Courses

UPPER DIVISION COURSES (Intended for Undergraduates)

320. Creativity and Communication in the Arts (3) Cr/NC

One lecture and four hours of activity.

Prerequisite: Upper division standing.

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, and visual art events required.

400. Twentieth Century Revolution, the Arts, Society, and the Individual (3)

Two lectures and two hours of activity.

Relationship between society and the arts focusing on three twentieth century political revolutions and how artists reflected or influenced events. Experimental arts activities included.

**“If you are planning for a year,
sow rice. If you are planning
for a decade, plant trees. If you
are planning for a lifetime,
educate a person.”**

— *Chinese Proverb*

Psychology

In the College of Sciences

OFFICE: Life Sciences 110

TELEPHONE: (619) 594-5358

UNDERGRADUATE ADVISING OFFICE: Life Sciences 116

TELEPHONE: (619) 594-5412

FAX: (619) 594-1332

Faculty

Emeritus: Alf, Dicken, Gallo, Grossberg, Harari, Hillix, Hunrichs, Karen, Kass, Koppman, Leckart, Lee, Levine, Lynn, McDonald, O'Day, Penn, Psomas, Rosenbaum, Sattler, Segal, Smith, Stevens, Turner

Chair: Hornbeck

Professors: Atkins-Kaplan, Borges, Bryson, J., Bryson, R., Cronan, Dunn, Fenson, Franzini, Graf, Graham, Hornbeck, Ingram, Langlais, Litrownik, Marshall, Martin, Matt, McGivern, Mollenauer, Murphy, Plotnik, Radlow, Reed, Reilly, Riley, Rodin, Saccuzzo, Sallis, Schulte, Sheposh, Spinetta, Yaremko

Associate Professors: Defran, Hatstrup, Malcarne, McCordick, Price (Joseph), Price (Judy), Prislun, Scollay, Velasquez, Wilfley

Assistant Professors: Castañeda, Conte, Friend, McDonald, Pugh

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.

Minor in 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 Counsel-

ing; 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.

Advising

All psychology majors are urged to make an appointment at the Psychology Undergraduate Advising Office 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.

Psychology Major

With the B.A. Degree in Liberal Arts and Sciences

(Major Code: 20011)

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 psychology courses can apply to the 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

Satisfaction of the SDSU Mathematics and Writing Requirements is a prerequisite for all upper division courses in psychology. Refer to the Graduation Requirements section of the catalog for specific mathematics and writing requirements (freshmen/transfer students) that need to be satisfied. Competencies will be enforced by RegLine. Students who crash classes after RegLine will be required to show proof of competencies.

Preparation for the Major. Psychology 101, 211, 230, 260, 270, 271, and Biology 100. (19 units). Students planning to major in psychology are advised to take these courses for a letter grade and to complete them before progressing to upper division courses in the major. **NOTE:** Psychology majors may use Psychology 270 to satisfy Mathematics/Quantitative Reasoning General Education requirement. **NOTE ALSO:** A college level statistics course will be accepted from another department in lieu of Psychology 270.

Foreign 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 section of catalog on "Graduation Requirements." Psychology majors are urged to discuss scheduling the foreign language requirement with an adviser in the Psychology Undergraduate Advising Office.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

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 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 270 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 12 units selected from a list of content courses covering areas of developmental, abnormal, social, personality, cognitive, and sensation/perception.

Requirements for the Major. A minimum of 30 upper division units in psychology to include Psychology 301 or 410 and 12 units selected from Psychology 331 or 332 or 333, 340, 350, 351, 380, 388. The remaining 15 elective units may be selected from any psychology courses numbered 300 or above.

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 an advanced laboratory (Psychology 412-419). In addition, students should become involved as early as possible in faculty-sponsored research.

Psychology Minor

The minor in psychology consists of 18-21 units selected from one of the following areas:

Industrial/Organizational: Psychology 101 and 270 or equivalent; 12 units of upper division psychology to include Psychology 320, 370, and two of the following: Psychology 321, 326, 327. (18 units)

Personality and Social: 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.

Courses

Note: Many psychology courses have enforced prerequisites, meaning the student must provide proof of having completed the prerequisite to the instructor in order to remain enrolled. Students who have not completed an enforced prerequisite and who fail to drop the class officially will be assigned the grade of "U," 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

101. Introductory Psychology (3) I, II

Facts, principles, and concepts which are basic to understanding human behavior.

211. Learning (3) I, II

Prerequisite: Psychology 101.

Basic principles and research in animal and human learning. (Formerly numbered Psychology 210.)

230. Developmental Psychology (3) I, II, S

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. (Formerly numbered Psychology 330.)

250. Faculty Student Mentoring Program (1) Cr/NC

Provides upper class mentors for freshman and community college transfer students. Mentors assist students in locating campus resources, linking them with departmental advisers, identifying tutors in science courses and encouraging students to participate in workshops.

260. Introduction to Physiological Psychology (3) I, II

Prerequisites: Psychology 101 and Biology 100.

Elementary physiology of the nervous system. Physiological mechanisms underlying the psychological phenomena of sensation, perception, emotion, arousal, motivation, learning and memory, and cortical specialization.

270. Statistical Methods in Psychology (3) I, II

Prerequisites: Psychology 101; concurrent registration in Psychology 271; satisfaction of the Entry-Level Mathematics requirement; and qualification on the Mathematics Departmental Placement Examination, Part IA. **Proof of completion of prerequisites required:** Copy of ELM score or verification of exemption, and verification of registration in Psychology 271.

Quantitative methods in psychology. Measures of central tendency and variability, graphic methods and percentiles, linear correlation and regression, applications of the normal probability curve, and an introduction to statistical inference including analysis of variance and chi-square. 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 270; Biology 215; Civil and Environmental Engineering 160; Economics 201; Political Science 201; Sociology 201; Statistics 119 and 250.

271. Data Analysis in Psychology (1) I, II

Two hours of activity in computer laboratory.

Prerequisite: Satisfaction of the Entry-Level Mathematics requirement and credit or concurrent registration in Psychology 270. **Proof of completion of prerequisite required:** Verification of registration in Psychology 270 or copy of transcript.

Statistical and graphic analysis and interpretation of psychological data using computer technology. Activities involve statistical software such as SPSS for Mac/Intosh (Windows) as well as standard spreadsheets.

UPPER DIVISION COURSES
(Intended for Undergraduates)

301. Introduction to Research Methods in Psychology (3) I, II

Two lectures and two hours of activity.

Prerequisites: Psychology 101, 270, and 271. **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.

316. Behavior Modification (3)

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.

320. Personnel and Industrial Psychology (3) I, II

Prerequisites: Psychology 101, and 270 or statistics in another field. **Proof of completion of prerequisites required:** Copy of transcript.

Psychological principles applied to industrial problems of selection, placement and training.

321. Organizational Psychology (3) I, II

Prerequisite: Psychology 101.

Human behavior in the context of organizational life. Factors related to effectiveness of individuals and groups within organizations, including organization design, leadership and control, motivation, cooperation and conflict.

326. Principles of Personnel Interviewing (3)

Prerequisite: Psychology 101. Open only to Psychology majors and minors.

Psychological factors in interviewing; interviewing techniques. Supervised practice in interviewing for purposes of personnel selection, appraisal and development.

327. Psychology of Leadership Behavior (3)

Prerequisite: Psychology 320 or 321.

Theory, methods, and research in leadership behavior. Emphasis on practical applications in the workplace.

331. Psychology of Infant and Child Development (3) I, II

Prerequisite: Psychology 101 and 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. Not open to students with credit in Psychology 432 covering this topic.

332. Psychology of Adolescent and Adult Development (3) I, II

Prerequisites: Psychology 101 and 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.

333. Developmental Psychopathology (3)

Prerequisites: Psychology 101 and 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. Not open to students with credit in Psychology 453 covering this topic.

340. Social Psychology (3) I, II

Prerequisites: Psychology 101; completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required.

The major problems and findings concerning group behavior and group membership, the socialization of the individual, and processes of social interaction.

343. Intimate Relationships (1)

Prerequisite: Psychology 101.

Theoretical and empirical research on development, maintenance, and termination of intimate relationships such as friendship and love.

350. Abnormal Psychology (3) I, II, S

Prerequisites: Psychology 101; completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required.

Causes and treatment of abnormal behavior with emphasis on major behavior disorders.

351. Psychology of Personality (3), I, II, S

Prerequisites: Psychology 101; completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required.

Major theoretical approaches to individual differences and the study of the person. Techniques of personality assessment. Selected research findings.

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. (Formerly numbered Psychology 455.)

365. Drugs and Behavior (3)

Prerequisite: Psychology 260.

Fundamentals of regulation, administration, tolerance, dependence, and physiological activity of drugs. Effects of stimulants, depressants, opiates, psychedelics, and psychotherapeutic drugs on the nervous system and on cognitive, personality, and behavioral functioning.

370. Psychological Testing and Measurement (3) I, II

Prerequisite: Grade of B or better in Psychology 270 or equivalent statistics course. **Proof of completion of prerequisite required:** Copy of transcript.

Measurement theory and the basic principles of testing. Selection, construction and critical evaluation of group tests of intelligence, personality, aptitude, interest and achievement.

380. Cognitive Psychology (3)

Prerequisite: Psychology 101. Recommended: Psychology 211.

Theory and research on attention, learning, memory, thinking, understanding, and language.

388. Sensation and Perception (3)

Prerequisites: Psychology 101 and 260.

Theory and research in sensory and perceptual processes.

407. Health Psychology (3) I, II

Prerequisites: Psychology 211 and 270. **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.

410. Laboratory in Experimental Psychology (4) I, II

Two lectures and six hours of laboratory.

Prerequisites: Psychology 211, a grade of B or better in Psychology 270 or equivalent statistics course, and Psychology 271. **Proof of completion of prerequisites required:** Copy of transcript.

Understanding of experimental design, quantitative methods, and experimental reports as they are applied to all areas of psychology.

412. Advanced Laboratory in Social Psychology (4)

Two lectures and six hours of laboratory.

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.

415. Advanced Laboratory in Personality and Clinical Psychology (4)

Two lectures and six hours of laboratory.

Prerequisite: Psychology 410. Recommended: Psychology 350 or 351. **Proof of completion of prerequisite required:** Copy of transcript.

Experimental and theoretical literature, assigned and original laboratory projects in the field of personality and clinical psychology.

417. Advanced Laboratory in Primate Behavior (4)

Two lectures and six hours of laboratory.

Prerequisites: Psychology 101; 260 or three units of biology or three units of anthropology; and Psychology 270. Recommended: Psychology 410. **Proof of completion of prerequisites required:** Copy of transcript.

Experimental literature, assigned and original observational and experimental projects in the field of primate learning and behavior.

418. Advanced Laboratory in Developmental Psychology (4)

Two lectures and six hours of laboratory.

Prerequisites: Psychology 230 and 410. **Proof of completion of prerequisites required:** Copy of transcript.

Methods, techniques and principles used in the scientific study of child behavior.

419. Advanced Laboratory in Memory and Cognition (4)

Two lectures and six hours of laboratory.

Prerequisite: Psychology 410. Recommended: Psychology 380. **Proof of completion of prerequisite required:** Copy of transcript.

Experimental literature, assigned and original laboratory projects in human memory and cognition. Examination of information-processing capacities and processes in perception, learning, memory, and other cognitive activities.

432. Advanced Topics in Developmental Psychology (3)

Prerequisite: Psychology 230. **Proof of completion of prerequisite required:** Copy of transcript.

Selected areas in developmental psychology. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

446. Advanced Topics in Social Psychology (3)

Prerequisite: Psychology 340. **Proof of completion of prerequisite required:** Copy of transcript.

Selected areas in social psychology. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

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. Not open to students with credit in Psychology 650 or Counseling and School Psychology 660.

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.

457. Psychological Factors in Alcoholism (3)

Prerequisites: Six units of psychology and upper division standing.

Theoretical and empirical approaches to alcoholism: causes and treatment.

460. Advanced Topics in Physiological Psychology (3)

Prerequisite: Psychology 260 or six units of biology.

Selected areas within physiological psychology. See Class Schedule for specific content. May be repeated with new content. Maximum credit six units.

491. Academic or Psychological Counseling Experiences (3) Cr/NC

Prerequisites: Upper division psychology major with a 3.0 minimum grade point average and consent of the psychology undergraduate coordinator.

Individual supervision of academic or psychological counseling experiences, geared to the acquisition of counseling and communication skills. May be repeated with the approval of the psychology undergraduate coordinator. Maximum credit six units. No more than 12 units of courses numbered Psychology 491, 495, 497, 499 may be counted toward the major.

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.

495. Readings and Practice in Companionship Therapy (3) Cr/NC I, II

Prerequisites: Psychology 350 and three units from Psychology 230, 340, 350, or 351. **Proof of completion of prerequisites required:** Copy of transcript.

Students are paired with troubled or potentially troubled clients from selected community agencies, supervised by both the instructor and the agency. Assigned readings, small group meetings, written reports required. May be repeated with new client and agency. Maximum credit six units. No more than 12 units of courses numbered Psychology 491, 495, 497, 499 may be counted toward the major.

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.

497. Senior Project (1-3) I, II

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 12 units of courses numbered Psychology 491, 495, 497, 499 may be counted toward the major.

498. Undergraduate Honors Thesis (6)

Prerequisites: Psychology 410, 3.5 overall GPA, 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.

499. Special Study (1-3) Cr/NC I, II

Prerequisite: Consent of department chair.

Individual study, including library or laboratory research and a written report. Maximum credit six units. No more than 12 units of courses numbered Psychology 491, 495, 497, 499 may be counted toward the major.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

501. History of Psychology (3)

Limited to graduate students or psychology majors with senior standing.

The historical background of modern psychology.

502. Philosophical Issues in Psychology (3)

Prerequisite: Six units of psychology.

Mind-brain relationship and other topics at the interface of psychology and philosophy. (Formerly numbered Psychology 401.)

551. Clinical Psychology: Theory and Practice (4)

Two lectures and six hours of laboratory.

Prerequisite: Psychology 350. **Proof of completion of prerequisite required:** Copy of transcript.

Clinical assessment, theory and practice of behavior change, and professional ethics.

552. Psychology of Obesity and Weight Management (3)

Prerequisite: Senior or graduate standing in psychology or related fields.

Theory and current research issues on psychology of obesity, weight control, and eating disorders. Social, personality, cognitive, and physiological influences. Use of cognitive behavior modification for weight control.

587. Advanced Principles of Learning and Cognition (3)

Prerequisites: Psychology 211, 270, and 380.

Empirical data, basic principles and theoretical positions of major theorists in learning and cognitive psychology.

596. Selected Topics in Psychology (1-3)

Prerequisites: Psychology 101 and consent of instructor.

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 of six units of 596 applicable to a bachelor's degree. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

Public Administration and Urban Studies

In the College of Professional Studies and Fine Arts

OFFICE: Professional Studies and Fine Arts 105

TELEPHONE: (619) 594-6224

FAX: (619) 594-1165

A Member of the National Association of Schools of Public Affairs and Administration (NASPAA).

Faculty

Emeritus: Bigger, Boostrom, Kitchen, Kochanski, Leiffer

Director: Rea

Professors: Calavita, Caves, Clapp, Gazell, Gilbreath, Gitchoff, Gupta, Henderson, Pugh, Rea, Ryan, Sparrow, Sutton

Associate Professors: Dobbs, Lee, Sabath, Stock, Wilson

Assistant Professors: Pearl, Walshok

Offered by the School of Public Administration and Urban Studies

Master of City Planning degree.

Master of Public Administration degree.

Master of Science degree in criminal justice and criminology. (Jointly with the College of Arts and Letters.)

Major in criminal justice administration with the B.S. degree in applied arts and sciences. (Refer to this section of the catalog on Criminal Justice Administration.)

Major in public administration with the B.A. degree in applied arts and sciences.

Emphasis in city planning.

Major in urban studies with the B.A. degree in liberal arts and sciences. **See** Interdisciplinary Programs.

Minor in public administration.

Certificate in public administration (available at Imperial Valley Campus only).

The Major

Today, more than ever before, 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 directly to the need for more capable public administrators. 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.

The undergraduate public administration major is an interdisciplinary program. In addition to the courses taken within the department, provisions have been made for the student to 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, information and decision systems, political science, and statistics.

Career opportunities in public administration can be found throughout the public and private sectors, and the future is represented by an expanding job market. The Public Administration Center within the School of Public Administration and Urban Studies provides a comprehensive file of current job openings locally, throughout California, and across the country.

Upon graduation, students have secured 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.

Public Administration Major

With the B.A. Degree in Applied Arts and Sciences (Major Code: 21021)

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. Accountancy 201, Information and Decision Systems 180, Economics 101 and 102, Political Science 102, Public Administration 200, and a three-unit course in statistics. (21 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

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; and 15 units selected with the approval of an adviser from the public administration faculty. Within this program, students may specialize 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. A master plan of the courses taken to fulfill the major must be approved by a public administration program faculty adviser and filed with the Office of Admissions and Records one semester before graduation.

Emphasis in City Planning (Major Code: 21021)

Preparation for the Major. Accountancy 201, Economics 101 and 102, Information and Decision Systems 180, Political Science 102, Public Administration 200, and a three-unit course in statistics. (21 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

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 two courses selected from Public Administration 341, 350, 510, and 512. A master plan of courses taken to fulfill this emphasis must be approved by a city planning program faculty adviser and filed with the Office of Admissions and Records one semester before graduation.

Public Administration Minor

The minor in public administration consists of 24 units to include Political Science 102 and a course in statistics or Information and Decision Systems 180, Public Administration 301, 310 or 312 or 315, 330, 450, and two additional courses with the consent of a public administration adviser. Prerequisites for the minor include Economics 101 and 102.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Public Administration Certificate

(Imperial Valley Campus)

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

LOWER DIVISION COURSE

200. The Urban Scene (3) I, II

Key issues in public administration, criminal justice administration, and city planning. Emphasis on government structure and public decision-making process, organizational behavior, effectiveness of criminal justice policies, zoning, and land use considerations.

UPPER DIVISION COURSES (Intended for Undergraduates)

301. Concepts and Issues in Public Administration (3) I, II

Theory and practice of governmental administration in differing environments, role of administrators in public policy, issues facing administrators, techniques of administration.

310. Management of Urban Governments (3) I, II

Problems of local units of government in the urban environment. Organization and function of local agencies. Emphasis on California.

312. Management of State Governments (3) I

Administrative and constitutional problems of state management in the American federal system. Emphasis on California.

315. Management of the Federal Government (3) II

Prerequisite: Public Administration 301.

Problems in the administration of the federal government. Leadership, specialization, unity of command, and oversight.

320. Introduction to Urban Planning (3) I, II

An introduction to community planning: regional, county, and city. Consideration of the master plan including its purposes, contents, and method of adoption.

330. Public Personnel Administration (3) I, II

Analysis of personnel problems. Supervision and management of public employees and public organizations in an age of change.

340. Administrative Behavior (3) I, II

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.

341. Administrative Management (3) I, II

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.

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 multi-disciplinary approach.

420. Methods of Analysis in City Planning (3) II

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.

440. Microcomputer Applications in Criminal Justice and Public Administration (3)

Two lectures and three hours of laboratory.

Prerequisite: Limited to criminal justice administration 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.

450. Fiscal and Budgetary Policy (3) I, II

Prerequisites: Public Administration 301, Economics 101 and 102. 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.

460. Administration and Public Policy Development (3) I, II

Process of formulating public policy with emphasis on the role of public agencies.

463. Science, Technology and Public Policy (3)

Scientific and technological innovations currently being introduced into public organizations and their impact on the public policy-making process, and effects of government regulations and policy on scientific and technological developments in society.

475A. The American City in the Cinema (3)

Two lectures and two hours of activity.

Growth of American city and various aspects of urban life, such as immigration, industrialization, anti-urbanism, and the city of the future, as reflected in American films.

475B. The American City in the Cinema (1) Cr/NC (Offered only in Extension)

Growth of American city and various aspects of urban life, such as immigration, industrialization, anti-urbanism, and the city of the future, as reflected in American films. May be repeated with new content. See Class Schedule for specific content. Maximum credit three units.

480. Leadership and the Public Sector (3)

Prerequisite: Public Administration 301.

Leaders as energizing forces for public administration. Analysis of leadership theories and case studies.

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.

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.

497. Investigation and Report (3) I, II

Prerequisite: Consent of instructor.

Analysis of special topics. Admission by permission of instructor.

498. Internship in Public Administration (2-6) Cr/NC I, II

Prerequisites: Public Administration 301, 330, 340, 341, 450, and all lower division required courses; senior standing and a "B" (3.0) average in the major.

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.

499. Special Study (1-3) I,II

Prerequisite: Twelve upper division units in public administration.

Individual study. Maximum credit six units.

UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)

510. Intergovernmental Relations in the United States (3) I

Prerequisite: Public Administration 310 or 312 or 315.

Constitution, political and administrative characteristics of American federalism, including regionalism, interstate compacts, and grants-in-aid.

512. The Metropolitan Area (3)

Prerequisite: Public Administration 310 or 312.

Problems of government and administration arising from population patterns and physical and social structures of metropolitan areas.

520. Decision Making in the Urban Community (3)

Prerequisite: Public Administration 310.

Processes of decision making in the management of urban communities.

525. The U.S. City Planning Process (3) I

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.

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.

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.

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.

550. Budgetary and Financial Administration in the Public Sector (3) II

Prerequisites: Public Administration 301 and 450.

Management trends in public sector financial administration; budgetary procedures and techniques; control and monitoring systems. Cash management, capital projects management, debt administration, disbursement, funds management, and auditing.

570. Administrative Law (3)

Prerequisite: Public Administration 301.

The law of public office and public officers, powers of administrative authorities, scope and limits of administrative powers, remedies against administrative action.

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.

**GRADUATE COURSES IN
PUBLIC ADMINISTRATION AND URBAN STUDIES
and CITY PLANNING**

Refer to Bulletin of the Graduate Division.

Recreation

In the College of Professional Studies and Fine Arts

OFFICE: Professional Studies and Fine Arts 431

TELEPHONE: (619) 594-5110

FAX: (619) 594-3320

Accredited by the National Recreation and Parks Association.

(**Note:** Students graduating from this program are immediately eligible to sit for the examination to become a Certified Leisure Professional and thereby acquire this valuable credential for professional advancement.)

Faculty

Emeritus: Geba, Hanson, Hutchinson, Peterson, Rankin
Chair: Dixon
Professors: Beck, L., Dixon, Duncan, Gattas, Lamke
Lecturers: Beck, A., Scott

Offered by the Department of Recreation, Parks and Tourism

Major in recreation administration with the B.S. degree in applied arts and sciences.

Emphasis in outdoor recreation.
Emphasis in recreation systems management.
Emphasis in recreation therapy.
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.

Increasingly diverse opportunities are available in the park, recreation and tourism profession. The major offers a sufficiently wide range of courses for students who may wish to enter diverse recreation, park, or human services fields.

Students in this major elect one of three areas of emphasis. The outdoor recreation 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.

Recreation systems management stresses the effective organization, administration and supervision of recreation, park, and tourism agencies, both public and private.

Recreation therapy prepares students to work in clinical and community settings with the disabled. It stresses elements of both psychology and social science, as well as recreation leadership skills. Students learn about assessment, intervention, and evaluation for planning recreation programs.

Outdoor recreation graduates serve as naturalists, outdoor education specialists, outdoor recreation planners, park interpreters, and park rangers.

Recreation systems management 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.

Recreation therapy graduates may become therapeutic recreation specialists, registered and certified by state and national certification plans. They are employed typically by hospitals, convalescent and rehabilitation centers, and retirement communities.

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 may be planned with an emphasis in one of the following three areas: (1) Outdoor Recreation, (2) Recreation Systems Management, or (3) Recreation Therapy.

A minor is not required with this major.

Emphasis in Outdoor Recreation

Preparation for the Major. Recreation 101, 107, 284; Biology 100, 100L; Geography 101; Geological Sciences 100, 101; Psychology 101; Sociology 101. (27 units)

Upper Division Writing Requirement. Passing the University Writing Examination or Recreation 396W with a grade of C (2.0) or better.

Major. A minimum of 54 upper division units to include Recreation 304, 305, 351, 464, 485, 487, 489, 498 (12 units), 560, 565, 575; Geography 370; and nine units selected from Biology 327, 359; Geography 572; Geological Sciences 301; History 441; Political Science 334; Psychology 340; Recreation 450, 496.

Emphasis in Recreation Systems Management

Preparation for the Major. Recreation 101, 107, 284; Information and Decision Systems 180; Psychology 101; Sociology 101; and six units selected from Accountancy 201; Economics 101; Finance 140; Information and Decision Systems 290. (25 units)

Upper Division Writing Requirement. Passing the University Writing Examination or Recreation 396W with a grade of C (2.0) or better.

Major. A minimum of 51 upper division units to include Recreation 304, 305, 351, 464, 498 (12 units), 560, 565, 575; nine units selected from Recreation 340, 450, 460, 470, 475, 485, 580; and nine units selected from Counseling and School Psychology 400; Marketing 370, 371, 373; Psychology 321, 340; Public Administration 301, 340, 350, 460; Sociology 355, 444, 557.

Emphasis in Recreation Therapy

Preparation for the Major. Recreation 101, 107, 284; Biology 212; Information and Decision Systems 290; Psychology 101; Social Work 110; Sociology 101. (26 units)

Upper Division Writing Requirement. Passing the University Writing Examination or Recreation 396W with a grade of C (2.0) or better.

Major. A minimum of 54 upper division units to include Recreation 304, 305, 351, 361, 371, 464, 498 (12 unit section), 560, 565, 575; Biology 336; Psychology 350; and nine units selected from Counseling and School Psychology 400; Exercise and Nutritional Sciences 301; Psychology 333, 351, 452; Sociology 436, 441, 443, 444, 528, 543. Note: To satisfy professional certification programs, completion of nine units should include one upper division course specifically oriented to "human growth and development" and one upper division course in a "helping area" outside of psychology, e.g. counseling, sociology, special education, or human services.

Recreation Minor

The minor in recreation consists of a minimum of 22 units to include Recreation 101, 107, 304, 305, and nine additional upper division units selected from Recreation 340, 351, 361, 371, 464, 475, 485, 496, 575, 580. Prerequisite to the minor includes Biology 100.

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

LOWER DIVISION COURSES

101. Introduction to Recreation Systems (3) I, II (CAN REC 2)

Basic role of recreation and park systems in today's society. Scope of recreation services, their history, philosophy, facilities, programs, personnel and evaluation.

107. Recreation Planning and Leadership (4) I, II

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.

284. Supervised Field Work (3) Cr/NC I, II, S

Prerequisites: Consent of instructor or department chair, credit or concurrent registration in Recreation 107, 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.

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)

304. Challenges of Leisure (3) I, II

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

Study of leisure and its impact on contemporary life; issues affecting recreation in today's urbanized society. (Formerly numbered Recreation 204.)

305. Wilderness and the Leisure Experience (3) I, II

Prerequisites: Biology 100; and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences.

Use and abuse of natural resources for recreational purposes. Effects of increased leisure on wilderness areas. Field experiences required. (Formerly numbered Recreation 205.)

340. Conduct of Recreational Sports (3) I, II

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.

351. Recreation for Special Populations (3) I, II

Analysis of the sociopsychological aspects of special populations and their implications for leisure pursuits. Field trips may be included.

361. Scientific Foundations of Recreation Therapy (3)

Prerequisite: Recreation 351 required for recreation majors; open to others with consent of instructor.

Theoretical principles of therapy and prevention. Survey of medical and psychiatric pathology and terminology.

371. Professional Foundations of Recreation Therapy (3) I, II

Prerequisite: Recreation 351 required for recreation majors; open to others with consent of instructor.

Analysis of present-day policies, programs, implementation and future aspects of professional principles of recreation therapy.

396W. Writing in Recreation Settings (3) I, II

Prerequisites: Satisfies University Upper Division Writing requirement for students who have completed 60 units, fulfilled the Writing Competency requirement, and completed the General Education requirement in Communication and Critical Thinking. **Proof of completion of prerequisites required:** Test scores or verification of exemption; copy of transcript.

Theory and practice of writing in the field of recreation and parks with application to various settings.

450. Camp and Aquatic Administration (3)

Prerequisite: Recreation 101.

Management of resident, day and travel camps and swimming pools, beaches, lakes and marinas; legal requirements, health and safety standards, finances, programming, maintenance, and planning.

460. Industrial, Corporate, and Military Recreation (3) II

Prerequisites recommended: Recreation 101 and 107.

Industrial, corporate, and military recreation services with emphasis on organizational patterns including underlying and theoretical concepts, finances, types of programs, specialized administrative skills, and current trends and issues.

464. Supervision of Recreation and Park Agencies (3) I, II

Prerequisite: Recreation 107.

Interagency relations, personnel policies and procedures, volunteer coordination, supervisory techniques, community organization, public relations in public, private and commercial settings.

470. Recreational Travel and Tourism Management (3) I

Prerequisites recommended: Recreation 101 and 304.

Tourism management, economics, marketing and development. Recognizing indicators of tourism's recreational, social and cultural impact. Organization of tourism industry and its components.

475. Commercial Recreation Management (3) I

Analysis of commercial recreation field, including design, development, programming and marketing aspects of various commercial recreation enterprises.

484. Directed Leadership (3) Cr/NC I, II, S

One lecture and eight hours of supervised activity.

Prerequisite: Recreation 284.

Supervised leadership experience in public and private recreation agencies. Maximum credit six units.

485. Outdoor Recreation Planning and Policy (3) II

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.

487. Outdoor Education and Environmental Interpretation (3)

Prerequisite: Recreation 101.

Philosophy, theory, methods, and scope of outdoor education and environmental interpretation.

489. Outdoor Leadership and Adventure Programming (3)

Prerequisite: Recreation 305.

Theoretical principles and experience in leadership, judgment, and decision making in outdoor adventure programming.

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.

498. Internship in Recreation Systems (6 or 12) Cr/NC I, II, S

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.

Students will be assigned to various governmental, commercial, private or medical agencies conducting recreation programs. Variety of experiences in supervision and administration. Maximum credit 12 units.

499. Special Study (1-3) I, II

Prerequisite: Consent of special study adviser.

Individual study. Maximum credit six units.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

560. Legal and Fiscal Aspects of Park and Recreation Management (3)

Prerequisite: Recreation 464.

Legal obligations and basic principles of fiscal management pertinent to delivery of leisure services. Budgeting, record keeping, liability, open space acquisition and preservation, constitutional guarantees, administrative regulations, contracts, criminal law, and legal research.

565. Recreation Systems Administration and Research (3)

Prerequisite: Recreation 464.

Organizational behavior, planning, policy development, and future trends of recreation systems. Methods of investigation, data analysis, and reporting in relation to research needs in recreation, parks, and tourism. Not open to students with credit in Recreation 570.

575. Designing Recreation and Park Areas and Facilities (3) I, II

Prerequisite: Recreation 101.

Design principles and concepts applied to planning and development of park and recreation areas and facilities.

580. Leisure and the Aging Process (3) II

Concepts of the relationship between leisure and gerontology are examined. Influence of leisure and recreation on work and life satisfaction of older adults.

**GRADUATE COURSES
Refer to Bulletin of the Graduate Division.**

Regulatory Affairs

OFFICE: Life Sciences Annex
TELEPHONE: (619) 594-2822
FAX: (619) 594-6381
EMAIL: cbbd@sciences.sdsu.edu
WWW: <http://www.cbbd.sdsu.edu/regaffairs>

Faculty

Faculty assigned to teach regulatory affairs courses are drawn from the Colleges of Sciences, Engineering, Business Administration, and the Center for Bio-Pharmaceutical and Biodevice Development.

Faculty Members of the Center for Bio/Pharmaceutical and Biodevice Development

- *Kenneth J. Bart, M.D., M.P.H., Professor of Public Health, Director of the Graduate School of Public Health
- *A. Stephen Dahms, Ph.D., Professor of Chemistry, Director, Center for Bio/Pharmaceutical and Biodevice Development
- *Kenneth E. Marino, Ph.D., Professor of Management, Associate Dean and Director, Graduate program, College of Business Administration
- *John G. Pinto, Ph.D., Professor of Mechanical Engineering, Assistant Dean for Research and Graduate Programs and Director of Doctoral Program in Engineering
- *Donald R. Short, Jr., Ph.D., Professor of Mathematical and Computer Sciences
- *Dale Chatfield, Ph.D., Associate Professor of Chemistry, Chair, Department of Chemistry
- *Larry E. Gundersen, Ph.D., Senior Staff Scientist (equivalent rank of Professor), Director, Regulatory Affairs Program
- *Robert Wang, Ph.D., Senior Staff Scientist (equivalent rank of Professor), Director, Corporate Affairs, Associate Director, Center for Bio/Pharmaceutical and Biodevice Development.

* Services on the Faculty Governing Board which makes recommendations on admission and curriculum.

Offered by Regulatory Affairs

Master of Science degree in regulatory affairs.

“It is hard to fail; but it is worse never to have tried to succeed.”

— *Theodore Roosevelt*

Courses

UPPER DIVISION COURSES

(Also Acceptable for Advanced Degrees)

573. Pharmaceutical, Biotechnology, and Medical Device Industries (3)

Prerequisite: Chemistry 361A or 365.

Pharmaceutical, biotechnology, and medical device industries. Company organization and product development and commercialization associated activities, e.g., drug discovery, chemical synthesis, quality assurance, regulatory affairs, manufacturing, control and marketing.

575. Food and Drug Law (3)

Prerequisite: Regulatory Affairs 573.

Laws governing drug, biological, and medical device products. Discussion of Federal Food, Drug, and Cosmetic Act, U.S. Public Health Service Act, Title 21 Code of Federal Regulations, and various amendments.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

Religious Studies

In the College of Arts and Letters

OFFICE: Adams Humanities 4231
TELEPHONE: (619) 594-5185
FAX: (619) 594-1004
EMAIL: erother@mail.sdsu.edu

Faculty

Emeritus: Anderson, Downing, Friedman, Gefter, Jordan, Khalil
Chair: Sparks
Professors: Johnson, Sparks
Associate Professor: Holler
Assistant Professor: Kohn
Lecturers: Boni, Thomas

Offered by the Department

Major in religious studies with the B.A. degree in liberal arts and sciences.

Minor in religious studies.

The Major

Religious studies seeks to explore the role of religion as an important part of human history. It is designed to improve understanding of religion, not to advocate religious belief or any particular religious tradition.

Religious studies students examine the major Eastern and Western religions, their founders and leaders, myths and rituals, theologies, creeds and scriptures, and institutional forms, as well as the relationship between religion and literature, the arts, ethics, science, and psychology.

Career opportunities available to religious studies graduates include positions such as university, college, community college, or secondary school teacher (graduate study and/or teaching credential required); counselor and social worker (graduate study required); religious education director, rabbi, priest, or minister in a church or synagogue setting (graduate study required); religion reporter or editor for a newspaper or magazine; textbook editor. The religious studies program is also excellent background for graduate professional programs in such areas as law, business, and foreign service.

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. Students seeking a minor in religious studies under the *Individualized Program* area must confer with the department adviser in the first semester of their study.

Religious Studies Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 15101)

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; Philosophy 101 or 102 or Religious Studies 102. (6 units)

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Religious Studies 396W or, with approval of the department, Rhetoric and Writing Studies 305W or Sociology 396W with a grade of C (2.0) or better.

Major. A minimum of 27 upper division units in religious studies to include Religious Studies 300, either 301 or 305, and at least three units from each of the three areas listed below:

Western Religious Traditions: Religious Studies 318, 320, 325, 330, 331, 340, 390, 580*, 581*, 582*, 583*, 596*.

Eastern Religious Traditions: Religious Studies 401, 403, 580*, 581*, 582*, 583*, 596*.

Religion and Culture: Three units from Religious Studies 350, 353, 354, 355, 360, 363, 365, 370, 380, 385, 580*, 581*, 582*, 583*, 596*.

* When deemed relevant by the department adviser. Maximum credit six units for any course with variable content.

Religious Studies Minor

The minor in religious studies consists of a minimum of 15 units to include at least three lower division units in religious studies, and 12 units from one of the three areas listed below:

Western Religions: Religious Studies 301, 305, 318, 320, 325, 330, 331, 340, 390, 580*, 581*, 582*, 583*, 596*.

Eastern Religions: Religious Studies 401, 403, 580*, 581*, 582*, 583*, 596*.

Religion and Culture: Religious Studies 350, 353, 354, 355, 360, 363, 365, 370, 380, 385, 580*, 581*, 582*, 583*, 596*.

Or *AN INDIVIDUALIZED PROGRAM* of 12 upper division units approved in advance by the 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.

* When deemed relevant by the department adviser. Maximum credit six units for any course with variable content.

Courses

LOWER DIVISION COURSES

101. World Religions (3) I, II

Major figures, attitudes, and teachings of world religions.

102. Introduction to Religion (3) I, II

Nature, meaning, and presuppositions of religious experience.

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)

300. Ways of Understanding Religion (3) I

Prerequisite: Three units of religious studies.

Major approaches to study of religious phenomena and central issues in methodology.

301. Hebrew Scriptures (3) I, II

Prerequisites: Three units of religious studies; and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

Problems of composition and historical significance in the context of religious meanings of the scriptures known to Jews as the Tanakh (the Pentateuch, the Prophets and the Writings) and to Christians as the Old Testament.

305. The New Testament (3) I, II

Prerequisite: Three units of religious studies. Recommended: Religious Studies 301.

Problems of composition and historical significance in the context of religious meanings.

318. Modern Religious Thought in the West (3)

Prerequisite: Three units of religious studies.

Selected issues in religious thought in Europe and America during the nineteenth and twentieth centuries.

320. Judaism (3)

Prerequisites: Three units of religious studies; and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

Major doctrines, practices, and developments from rabbinic times to present.

325. Christianity (3)

Prerequisites: Three units of religious studies; and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

Major doctrines, practices and developments from time of Jesus to present.

330. Topics in Judaism (1-3)

Prerequisite: Three units of religious studies.

Selected topics such as early Hebrew religion, the Talmudic period, medieval religious thought, mysticism, modern Judaism from the emancipation to the Holocaust, contemporary thought. May be repeated with different content. See Class Schedule for specific content. Maximum credit six units.

331. Topics in Islam (3)

Prerequisite: Three units of religious studies.

Selected topics such as the Qur'an and its interpretation (*tafsir*), Prophet Muhammed and his traditions (*hadith*), and Islamic mysticism (*Sufism*). May be repeated with new content. Maximum credit six units.

340. Islam (3)

Prerequisites: Three units of religious studies; and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

Major doctrines, practices and developments from the time of Muhammed to the present.

350. Dynamics of Religious Experience (3)

Prerequisites: Three units of religious studies; and completion of the General Education requirement in Foundations II.C., Humanities.

Chief data and major approaches in the study of individuals' religious behavior and experiences. Special attention to relevant problems in world religions and philosophical views of man.

353. Religion and Psychology (3)

Prerequisites: Three units of religious studies; and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

Theological and religious interpretations of psychological dimension of human existence. Critique of psychological inquiry into traditional and contemporary forms of religious life. 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.

354. Religion and Society (3)

Prerequisites: Three units of religious studies; and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

Theological and religious interpretations of the social dimension of human existence. Critique of social science inquiry into traditional and contemporary forms of religious life.

355. Love and Marriage in Western Religions (3)

Prerequisite: Three units in religious studies.

Judeo-Christian practice and meaning of love, romance, and marriage based on historical and literary sources. Biblical period to present with emphasis on contemporary values and issues.

360. Religion, Literature, and the Arts (3)

Prerequisite: Three units of religious studies.

The relations between religion, literature, and the arts in major cultural traditions.

363. Religion and the Sciences (3)

Prerequisites: Three units of religious studies; and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

Relation of the natural sciences to religious questions of nature, humanity, and destiny.

365. Religion and Ethics (3)

Prerequisite: Three units of religious studies.

Values, morality, and responsibility, from religious perspectives. Application to contemporary moral issues.

370. Women and Religion (3)

Prerequisite: Three units of religious studies.

Place and role of women in major religious traditions; historic contributions of women to religion; female deities; feminist responses to male-centered traditions.

380. Shamanism (3)

Prerequisite: Three units of religious studies.

Shamanism from a global perspective, from primal to modern times, its persistence and revitalization in post-industrial religion; its religious forms through comparative study of Amazonian, African, Native American, and Southeast Asian forms.

385. Native American Religions (3)

Prerequisite: Three units of religious studies.

Native American religions with focus on sacred culture, world view, ritual life, community and myth as a basis for interpreting religious experience; encounter of Indian traditions with modernity and revitalization responses.

390. Religion in America (3)

Prerequisite: Three units of religious studies.

Selected topics in religion in America, such as church-state relations, transcendentalism, Black Christianity, pentecostalism, theosophy, oriental movements in America and neo-paganism. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

396W. Writing/Research Methods (1) Cr/NC

Prerequisites: Six upper division units in religious studies. Must be taken concurrently with an upper division course in religious studies. Satisfies University Upper Division Writing requirement for students who have completed 60 units, fulfilled the Writing Competency requirement, and completed the General Education requirement in Communication and Critical Thinking. **Proof of completion of prerequisites required:** Test scores or verification of exemption; copy of transcript.

Research and writing in field of religious studies.

401. Religions of India (3)

Prerequisites: Three units of religious studies; and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

Phenomenological studies in the major religious traditions of India, especially Hinduism and Buddhism.

403. Religions of the Far East (3)

Prerequisites: Three units of religious studies; and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

Phenomenological studies in the major religious traditions of east Asia, especially China and Japan.

496. Experimental Topics (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.

499. Special Study (1-3) I, II

Prerequisite: Twelve upper division units in religious studies.

Individual study. Maximum credit six units.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

580. A Major Figure (3) I, II

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.

581. Major Theme (3) I, II

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.

582. Major Text (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.

583. Major Tradition (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.

596. Advanced Topics in Religious Studies (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. Maximum credit of six units of 596 applicable to a master's degree. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

**GRADUATE COURSES
Refer to Bulletin of the Graduate Division.**

Rhetoric and Writing Studies

In the College of Arts and Letters

OFFICE: Nasatir Hall 227A
TELEPHONE: (619) 594-6515
FAX: (619) 594-6530

Faculty

Emeritus: Denman, MacDonald
Chair:
Professors: Johns, Sweedler-Brown
Associate Professors: Ornatowski, Poole, Quandahl, Robinett
Assistant Professors: Boyd, Hindman
Lecturers: Dudley, Emery, Finn, Fish, Griffith, R., Hoffman,
Johnson, Kilcrease, Mack, Maggio, Miller, Reed, Renner, Sherman,
Stagnaro, Thompson, Williams, J., Williams, T.

Offered by the Department

Courses in reading, writing, and learning skills.
Major or minor work in rhetoric and writing studies is not offered.

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 which integrates writing and reading with critical thinking throughout the curriculum.

Developmental Writing Program (formerly offered by the Academic Skills Center): 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 (formerly offered by the Department of English and Comparative Literature): 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 (formerly offered by the Department of English and Comparative Literature): The department offers expository writing ("W") courses which satisfy the University's Upper Division Writing 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.

Technical and Scientific Writing Certificate

The purpose of this certificate program is to prepare students for careers in technical and scientific writing. The program is designed for people who are working on degrees in nontechnical, technical, and scientific fields. 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. Students will complete a total of 21 units that must be approved by the director of the program in the Department of Rhetoric and Writing Studies. Applicants for entrance into the program must complete a writing assessment examination, administered by the director of the program, and may be required to take additional coursework to improve writing proficiency. Nine units in the certificate program may be counted toward the major in English, and three units may be counted toward the minor in English.

Required Courses: (9 units)

Rhetoric and Writing Studies 500W*, Advanced Composition
Rhetoric and Writing Studies 503W*, Technical Writing
Rhetoric and Writing Studies 504*, Problems in Technical
Communication

* Additional prerequisites required. These courses formerly offered in English.

Recommended Courses: Students should consult with the director of the program before selecting any courses so that an individualized program can be developed. Students with technical or scientific backgrounds should concentrate their coursework in writing. Those with nontechnical or nonscientific backgrounds should concentrate on either a technical or scientific specialty. Rhetoric and Writing Studies 506, Writing Internship, is recommended for all students. A maximum of six units of transfer credit may be applied to the program. (12 units.)

Courses

LOWER DIVISION COURSES (Non-Baccalaureate Credit)

Rhetoric and writing studies courses numbered below 100 may not be used to satisfy graduation requirements.

92A. Developmental Writing: Fundamentals of Writing (3) Cr/NC/SP I, II, S

Academic prose, emphasizing the purpose, structure, and style of academic essays. Designed to improve student skills in planning, drafting, revising, and editing essays. Open to students who have not satisfied the SDSU lower division writing competency requirement. Students attaining a score of 8 or better on the final examination earn a grade of "Cr" and satisfy the SDSU lower division writing competency requirement. Students attaining a score of 7 or less with completion of all course requirements earn a grade of "SP." Students receiving an "SP" grade should enroll in Rhetoric and Writing Studies 92B. Not open to students with credit in Rhetoric and Writing Studies 97A.

**92B. Developmental Writing: Intermediate (3) Cr/NC I, II, S

Prerequisite: Open only to students who have earned "SP" (satisfactory progress) in Rhetoric and Writing Studies 92A or 99A but have not satisfied the Writing Competency requirement.

Evaluation based on student writing portfolio. Credit in Rhetoric and Writing Studies 92B satisfies the SDSU lower division writing competency requirement.

93. Developmental Reading (Integrated Curriculum) (3) Cr/NC I, II

Improvement of individual reading effectiveness, emphasizing textbook mastery and incorporating texts from the General Education curriculum. Reading comprehension—not speed—is stressed.

94. Developmental Writing for International or Bilingual Students (3) Cr/NC/SP I, II

Intermediate written English with emphasis on problems of non-native speakers; discussion of sentence, paragraph, and essay writing skills. Open only to ESL students who have not satisfied the SDSU Writing Competency requirement. Students attaining a score of 8 or better on the final examination earn a grade of "Cr" and satisfy the SDSU lower division writing competency requirement. Students attaining a score of 7 or less with completion of all course requirements earn a grade of "SP." Students receiving an "SP" should enroll in Rhetoric and Writing Studies 95.

** Rhetoric and Writing Studies 92B is not offered at the Imperial Valley Campus. Students who do not attain a Cr in Rhetoric and Writing Studies 92A at the Imperial Valley Campus should repeat Rhetoric and Writing Studies 92A.

95. Developmental Writing for International or Bilingual Students (3) Cr/NC/SP I, II

Advanced written English with emphasis on problems of nonnative speakers; discussion of audience, purpose, and style; advanced grammar and essay writing. For students who have attained Satisfactory Progress (SP) in Rhetoric and Writing Studies 94, but have not satisfied the SDSU lower division writing competency requirement. Students attaining a score of 8 or better on the final examination earn a grade of "Cr" and satisfy the SDSU lower division writing competency requirement.

97A. Developmental Reading and Writing (Integrated Curriculum) (4) Cr/NC/SP I

Three lectures and two hours of activity.

Students enrolled in Rhetoric and Writing Studies 97A must also be enrolled in the Intensive Learning Experience, which integrates instruction in the writing process and academic prose with the content of a General Education course. Rhetoric and Writing Studies 97A is designed to provide students with writing and critical thinking skills essential to academic achievement. Emphasizes individualized instruction to meet the unique needs of each student.

The final examination in Rhetoric and Writing Studies 97A is the Developmental Writing Proficiency Examination. Students attaining a score of 8 or better on the final examination earn a grade of "Cr" and satisfy the SDSU lower division writing competency requirement. Students attaining a score of 7 or less with completion of all course requirements earn a grade of "SP" Students receiving an "SP" grade should enroll in Rhetoric and Writing Studies 97A. Not open to students with credit in Rhetoric and Writing Studies 92A.

97B. Developmental Reading and Writing (Integrated Curriculum) (4) Cr/NC/SP II

Three lectures and two hours of activity.

Prerequisites: Open only to students who earned "SP" (satisfactory progress) in Rhetoric and Writing Studies 97A but have not satisfied the SDSU lower division writing competency requirement.

Individualized instruction in intermediate writing skills. Credit in Rhetoric and Writing Studies 97B satisfies the SDSU writing competency requirement. Not open to students with credit in Rhetoric and Writing Studies 92B.

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. Communication Skills

**LOWER DIVISION COURSES
(Acceptable for Baccalaureate Credit)**

100. Writing and Reading as Critical Inquiry (3) I, II (CAN ENGL 2)

International students are advised to take Linguistics 100.

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; proof of Cr in Rhetoric and Writing Studies 92A or 92B or 97A or 97B.

Introduction to writing and reading as critical inquiry, designed to help students successfully undertake writing projects that have depth and complexity of university level work. Students learn to use sources 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 Chicana and Chicano Studies 111B or Linguistics 100.

200. Writing from Sources (3) I, II

International students are advised to take Linguistics 200.

Prerequisites: Satisfaction of the English Placement Test and Writing Competency requirements and Rhetoric and Writing Studies 100 or Africana Studies 120 or Chicana and Chicano Studies 111B or Linguistics 100. **Proof of completion of prerequisites required:** Test scores or verification of exemption; copy of transcript.

Further practice in academic and professional writing, reading, and critical thinking. Emphasis on using multiple sources, finding relationships among them and generating analytical responses to them through writing. Continued attention to decisions about structure, cohesion, and rhetorical conventions. Not open to students with credit in Africana Studies 200 or Linguistics 200. Completion of Rhetoric and Writing Studies 200 may require completion of the library workbook assignment.

296. Experimental Topics (1-4) Cr/NC

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)**

305W. Academic Writing (3)

International students are advised to take Linguistics 305W.

Prerequisites: Satisfies University Upper Division Writing requirement for students who have completed 60 units, fulfilled the Writing Competency requirement, and completed the General Education requirement in Communication and Critical Thinking. It is strongly recommended that the course be taken at the beginning of the junior year, so that students have an opportunity to demonstrate their writing proficiency in upper division courses taken after they pass Rhetoric and Writing Studies 305W. **Proof of completion of prerequisites required:** Test scores or verification of exemption; copy of transcript.

To develop proficiency in composing, under time constraints, substantial essays which analyze or explicate subjects previously investigated and discussed. Intended for students not majoring in English or Comparative Literature who have not fulfilled the Upper Division Writing requirement by examination.

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.

499. Directed Study (1-3) I, II

Prerequisites: Consent of instructor and approval of department chair.

Individual study. Maximum credit six units.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

500W. Advanced Composition (3) I, II

Prerequisites: Satisfies University Upper Division Writing requirement for students who have completed 60 units, fulfilled the Writing Competency requirement, and completed the General Education requirement in Communication and Critical Thinking. **Proof of completion of prerequisites required:** Test scores or verification of exemption; copy of transcript.

The theory and practice of expository writing, including the contributions of semantics, rhetoric, and logic.

501. Editing (3)

Prerequisites: 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.

503W. Technical Writing (3) I, II

Prerequisites: Rhetoric and Writing Studies 200. Satisfies University Upper Division Writing requirement for students who have completed 60 units, fulfilled the Writing Competency requirement, and completed the General Education requirement in Communication and Critical Thinking. **Proof of completion of prerequisites required:** Test scores or verification of exemption; copy of transcript.

Principles and practices of writing required in technical and scientific fields or professions, including technical writing style and rhetorical strategies of designing technical documents.

504. Problems in Technical Communication (3) I, II

Prerequisite: Rhetoric and Writing Studies 503W. Recommended: Graphics or drawing course.

Problems in technical writing, including graphics, printing, and reproduction of technical documents; types of technical communication, including reports, manuals, and proposals; manuscript editing and proofreading; audience analysis and readability; writing and recognition of clear technical prose.

506. Writing Internship (3) Cr/NC I, II, S

Prerequisites: Consent of instructor and successful completion of a 500-level writing course with a grade of B or better.

Intensive experience in writing and editing documents while student is under the joint supervision of an academic instructor and a professional coordinator.

509. Introduction to the Teaching of Composition (3) I, II

Prerequisite: Consent of instructor based on writing sample and/or test.

Techniques for teaching and evaluation of written composition. Provides a theoretical base for these techniques.

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. Maximum credit of six units of 596 applicable to a master's degree. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

NOTE:

Rhetoric and Writing Studies 97A is equivalent to Rhetoric and Writing Studies 92A.

Rhetoric and Writing Studies 97B is equivalent to Rhetoric and Writing Studies 92B.

Enrollment in Rhetoric and Writing Studies 97A and 97B is restricted to students participating in the Integrated Curriculum program.

Russian

In the College of Arts and Letters

OFFICE: Business Administration 304
TELEPHONE: (619) 594-6313
FAX: (619) 594-8006
EMAIL: russian.coord@sdsu.edu

Faculty

Emeritus: Dukas, Fetzer
Chair:
Associate Professor: Shapovalov

Offered by the Department of German and Russian Languages and Literatures

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 international business, with emphasis in Russian. **See** International Business.
Minor 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.

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.

Russian Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 11061)

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 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.

Preparation for the Major. Russian 100A, 100B, 200A, 200B, 211. (23 units)

Foreign Language Requirement. The foreign language requirement for graduation is automatically fulfilled through coursework for preparation for the major.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 24 upper division units in Russian to include Russian 301, 304, 305A-305B, 430 and nine units in 500-level courses 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)

All candidates for a teaching credential must complete all requirements as outlined in this section of the catalog under Policy Studies or Teacher Education. For students completing the single subject teaching credential program, no more than 54 units in Russian courses can apply to the degree.

This major may be used by students in policy studies 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, 211. (23 units)

Foreign Language Requirement. The foreign language requirement for graduation is automatically fulfilled through coursework for preparation for the major.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 30 upper division units in Russian to include 301, 303, 304, 305A-305B, 430, 501, 580; 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 German and Russian Languages and Literatures. The candidate must consult with the chair of the Department of German and Russian Languages and Literatures concerning this examination.

Russian Minor

The minor in Russian consists of a minimum of 20 units in Russian to include Russian 200B and six units of upper division courses in 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.

Foreign Language Requirement for the B.A. Degree in Liberal Arts and Sciences

Students electing the study of Russian to fulfill the foreign 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 foreign 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, although students with fewer than three years of high school level language may complete the first semester college course for graduation credit.
2. The first *three years* of high school level language count as the equivalent of the first two college semesters, although students with fewer than four years of high school level language may complete the second semester college course for graduation credit. Students who have completed three years of foreign language in high school will not receive credit for the first semester college course unless at least five years separate the last high school course and the first college course.
3. *Four years* of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the foreign language requirement.

Courses

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.

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.

100A. First Course in Russian (5) I

Pronunciation, oral practice, reading, essentials of grammar. Not open to students who have completed three years of high school Russian unless the third course was completed five or more years ago.

100B. Second Course in Russian (5) II

Prerequisite: Russian 100A or two years of high school Russian. Continuation of Russian 100A. Not open to students who have completed four years of high school Russian unless the fourth course was completed five or more years ago.

200A. Third Course in Russian (5) I

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.)

200B. Fourth Course in Russian (5) II

Prerequisite: Russian 200A. Continuation of Russian 200A.

211. Intermediate Conversation (3) II

Prerequisite: Russian 200A. Practice in the spoken language with emphasis on the articulation of Russian sounds; practical vocabulary; conversation on everyday cultural topics.

UPPER DIVISION COURSES (Intended for Undergraduates)

All upper division courses in Russian are taught in Russian unless otherwise stated.

301. Advanced Grammar and Composition (3)

Prerequisites: Russian 200B; and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors. **Proof of completion of prerequisites required:** Copy of transcript.

Advanced grammar and stylistics; intensive writing practice; reports based on outside reading.

303. Political and Business Russian (3)

Prerequisite: Russian 301. Commercial and political Russian, with emphasis on international relations and socioeconomic aspects of contemporary Russia.

304. Phonetics of Spoken Russian (3)

Prerequisites: Russian 200B and 211. Sound system of Russian with attention to variety of intonation patterns. Training in oral communication and self-expression through practical drills with emphasis on improvement of pronunciation and intonation.

305A-305B. Survey of Russian Literature (3-3)

Prerequisite: Completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors. Russian literature from its beginnings, with emphasis on nineteenth and twentieth centuries. Taught in English with readings in English.

430. Russian Civilization (3) I, II

Prerequisite: Russian 200B. **Proof of completion of prerequisite required:** Copy of transcript. Development of Russian culture; emphasis on painting, music, architecture, and literature within a social context.

499. Special Study (1-3) I, II

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)

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.

555. Russian Literature of the Nineteenth Century (3)

Prerequisite: Russian 200B. Development of Russian novel, short story, drama and poetry of the nineteenth century.

563. Russian Literature of the Twentieth Century (3)

Prerequisite: Russian 200B. Poetry, prose and drama of the twentieth century.

580. Russian Syntax and Stylistics (3)

Prerequisite: Russian 301. **Proof of completion of prerequisite required:** Copy of transcript. The structure of contemporary Russian.

596. Topics in Russian Studies (3) I, II

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. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES Refer to Bulletin of the Graduate Division.

Social Science

In the College of Arts and Letters

OFFICE: Adams Humanities 4192

TELEPHONE: (619) 594-6344

Faculty

Social Science is administered through the Social Science Committee.

Coordinator: O'Brien (History)

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 either the emphasis outlined in Africa and the Middle East or in Environment.

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 environment provides an opportunity for the student to gain an interdisciplinary perspective on some of the major quality of life, public health, and natural resource conservation problems facing the world today. The course offerings available in the emphasis will provide a basic understanding of the nature of the problems, as well as give more specific insights into such practical aspects as the economics and politics associated with these environmental challenges. The large range of courses from which students may choose allows them latitude to pursue their individual interests.

Students selecting the emphasis in environment will be prepared to pursue careers in a wide variety of fields associated with natural resource management, such as county, state, or federal agencies that manage parks, recreation areas, or other public lands. Entry-level jobs with planning or consulting firms are other possibilities. The emphasis will also provide students with a broad background that will be useful in a variety of graduate programs dealing with the natural environment or with natural resource conservation.

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.

Social Science Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 22011)

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. Three units of statistics selected from Economics 201, Political Science 201, Psychology 270, Sociology 201, or Statistics 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 100, 101, 102; (4) Geography 101, 102; (5) History 105, 106, 110A-110B, 115A-115B; (6) Political Science 101, 102, 103; (7) Sociology 101, 150. Statistics courses taken in a social science department may not be used in fulfillment of that department's six-unit sequence. (21 units)

Foreign 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 section of catalog on "Graduation Requirements." Spanish is recommended for those planning to work in this part of the United States.

Upper Division Writing Requirement. Passing the University Writing Examination or Sociology 396W with a grade of C (2.0) or better.

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 religious studies or psychology 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.

Students with a 15-unit specialization in Chicana and Chicano studies must take the remaining 12 lower division units and 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:

Africana Studies 331, 380, 445, 470, 471A, 471B.

American Indian Studies 303, 400, 440.

Chicana and Chicano Studies 301, 303, 320, 350A-350B, 480.

Psychology 320, 321, 340, 350, 351, 355, 452.
 Religious Studies 301, 305, 318, 340, 353, 363, 365, 401, 403.
 Women's Studies 310, 320, 325, 340, 341A-341B, 360, 370, 375,
 530, 580.

Emphasis in Africa and the Middle East

The adviser for this emphasis is Dr. David H. Johns, Department of Political Science.

Preparation for the Major. History 100, 101, and six units selected from Anthropology 101, 102; Comparative Literature 270A, 270B; Economics 101, 102; Geography 101, 102. (12 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.

Foreign 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. Students are encouraged to meet the foreign language competency requirement for the social science major by taking a language appropriate to their interests in African or Middle Eastern studies. Refer to the section of this catalog on "Graduation Requirements."

A minor is not required with the major.

Upper Division Writing Requirement. Passing the University Writing Examination or Anthropology 396W or Sociology 396W with a grade of C (2.0) or better.

Major. A minimum of 30 upper division units, selected with the consent of the adviser, to include at least 15 units in anthropology, economics, geography, history, political science or religious studies, or a combination of 15 units in art, comparative literature, humanities, and religious studies.

Required courses: Anthropology 449; Humanities 460; six units from History 473A, 473B, 475A, 475B, and 574; and Political Science 363 or 364. In addition, the following courses are recommended: Anthropology 350, 424; Economics 365, 489; Political Science 361, 481; Religious Studies 340.

Emphasis in Environment

The adviser for this emphasis is Dr. Philip R. Pryde, Department of Geography.

Preparation for the Major. Biology 100 and 100L; a six-unit sequence in each of three of the following fields: (1) anthropology, (2) economics, (3) geography, (4) history, (5) political science, and (6) sociology. (22 units)

Courses recommended for these sequences are as follows: Anthropology 101 and 102, Economics 101 and 102, Geography 101 and 102, History 105, 106, or 110A-110B or 115A-115B, Political Science 101 and 102, Sociology 101 and 150. Additional recommended courses include Geological Sciences 100 and 101.

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or Anthropology 396W or Sociology 396W with a grade of C (2.0) or better.

Major. A minimum of 30 upper division units to include:

A. Twelve units of core courses to include nine units from three departments selected from Economics 452, 453 or 454, Geography 370 or 573, History 441 or 540, Political Science 334 or 335, plus three additional units from this list; and

B. An additional 18 units from at least three departments selected from Economics 452, 453, or 454; Geography 370, 378, 409, 570, 571, 573, 574, 575, 577; History 441, 540; Political Science 334, 335; Sociology 350, 557. Also acceptable: Biology 315, 324, 327, 359, 540; Geological Sciences 301, 303; Community Health Education 350; Philosophy 332; Physics 301; Recreation 305, 487.

Social Science Major

In preparation for the Single Subject Teaching Credential With the B.A. Degree in Liberal Arts and Sciences (Major Code: 22011)

All candidates for a teaching credential must complete all requirements as outlined in this section of the catalog under Policy Studies or Teacher Education.

This major may be used by students in policy studies or teacher education or as undergraduate for the B.A. degree in Liberal Arts and sciences.

Preparation for the Major. Economics 101, 102; Geography 101, 102; History 100, 101; Political Science 101, 102, Religious Studies 101. (27 units)

Foreign 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 section of catalog on "Graduation Requirements." Spanish is recommended for those planning to work in this part of the United States.

Upper Division Writing Requirement. Passing the University Writing Examination or Anthropology 396W or History 430W or Sociology 396W with a grade of C (2.0) or better.

Major. A minimum of 42 upper division units to include:

United States and California History: History 410A-410B and History 541A-541B.

American Government and Politics: Three units selected from Political Science 305, 321, 334, 335, 347A, 348, 406, 436, 531, 537.

United States Geography: Geography 321.

Ethnic and Women's Studies: Six units from two departments selected from Africana Studies 322, 470, 471A-471B, American Indian Studies 400, 420, 440, Chicana and Chicano Studies 301, 350B, 375, History 422, Women's Studies 341A-341B, 370, 375.

World History: Nine units distributed as follows:

Three units each selected from two of the following areas:

Africa and the Middle East: History 473B, 475A, 475B, 574.

Asia: History 420, 421, 567, 570.

Latin America: Chicana and Chicano Studies 350A; History 415A, 415B, 551A, 551B, 555, 557.

Europe: Three units selected from History 407A, 407B, 440, 500A, 500B, 503A, 503B, 506, 507, 511A, 511B, 512A, 512B; Women's Studies 340.

International Politics: Three units selected from International Security and Conflict Resolution 300; Political Science 356, 359, 361, 363, 364, 375, 478, 479, 481, 566, 568; Women's Studies 580.

Economics: Three units selected from Economics 330, 336, 338, 490.

Additional Social Science Courses: Three units selected from Africana Studies 331, 420, 445, 452, 453; American Indian Studies 320, Anthropology 350, 410, 432, 529; Chicana and Chicano Studies 303, 320, 480; Psychology 340, 347, 350, 351, 355; Sociology 350, 355, 403, 421, 433, 444, 450, 457, 522, 537, 557; Women's Studies 310, 320, 385, 515, 521, 522, 536.

Courses

LOWER DIVISION COURSES

201A. Statistical Computer Package: SPSS (1) Cr/NC I, II

Two hours of laboratory for 11 weeks and 10 hours to be arranged.

Prerequisite: Credit or concurrent registration in an elementary statistics course.

Organization and modification of numerical data for computer analysis. Use of selected statistical procedures from the Statistical Package for the Social Sciences (SPSS) including frequency distributions, crosstabulation, t-tests, correlation and regression. Maximum combined credit of three units of Social Science 201A, 201B, 201C, 201D applicable to a bachelor's degree.

201B. Computer Database Applications (1) Cr/NC I, II

Two hours of laboratory for 11 weeks and 10 hours to be arranged.

Introduction to object oriented, relational database software with emphasis on use of databases in social sciences. Create a database, create forms, link database tables via Query, create sub-forms, perform sorts and filters, create reports, and use expressions to generate summary information.

201C. Computer Spreadsheet Applications (1) Cr/NC I, II

Two hours of laboratory for 11 weeks and 10 hours to be arranged.

Introduction to spreadsheet software with emphasis on their use in social sciences. Create a spreadsheet file, customize the appearance of data, work with functions, databases, graphs, arrays, and macros.

201D. Internet Resources (1) Cr/NC I, II

Two hours of laboratory for 11 weeks and 10 hours to be arranged.

Introduction to Internet. Locate information resources, retrieve and translate into appropriate formats, understand electronic mail, explore world wide web, and other resources such as LISTSERV's and USENET newsgroups. Focus on information for social sciences.

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.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

Social Work

In the College of Health and Human Services

OFFICE: Hepner Hall 119
TELEPHONE: (619) 594-6865

Accredited by the Council on Social Work Education.

Faculty

Emeritus: Ajemian, Baily, Brennen, Butler, Cohen, Davis, Guidry, Haworth, Ishikawa, Kahn, Kelley, Kukkonen, Pritchard, Raymer, Reichert, Riehman, Sardinias, Schmidt, Valle

Director: Harbert

Associate Director: Siman

Professors: Dean, DeGennaro, Griffin, Harbert, Jones, Landsverk, Stanford, Zuniga

Associate Professors: Finnegan, Harris, Siman

Assistant Professors: Barrio, Clapp, Hohman, Hughes, Packard, Rasmussen, Shillington, Sucato

Lecturers: Fong, Keith, Letourneau, Marsden, Milstein, Newell, Okamura, Segars, Siegel, Smith, Stanger, Walden O'Cull

Offered by the School of Social Work

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.

Human services paraprofessional certificate.

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 objective of the School of Social Work is to assist students in acquiring the essential knowledge, philosophy, and basic skills required for beginning professional social work practice; namely, to develop a philosophy which recognizes individual human welfare as the purpose and goal of social policy, to develop an awareness and understanding of human behavior, to attain a level of competence in practice methods and skills, to acquire knowledge in methods of research in social work, and to accept responsibility for continued development of competence in their practice after they have completed their academic education.

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 and program evaluation, 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.

Social Work Major

**With the B.A. Degree in Liberal Arts and Sciences
(Premajor Code: 21040) (Major Code: 21041)**

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 51 units in social work courses can apply to the degree.

A minor is not required with this major.

Preparation for the Major. All new students to this program are considered premajors and are assigned the 21040 premajor code. The code will stay in effect until students complete the 27 unit preparation for the major coursework. Students must come to the Undergraduate Adviser to complete a change of major form to the 21041 major code in order to take the upper division courses (exceptions to this are SWORK 350 and 360 which can be taken without the major code change). Students must change to the major code prior to REGLINE registration or the computer will not permit access to any social work course. The following nine courses constitute the preparation for the major: Social Work 110, 120, 130; Biology 100 or any three units in a human biology course; Economics 100 or three units of any economics course; Community Health Education 101; Psychology 101; Sociology 101; Psychology 270 or Sociology 201 or Statistics 250. (27 units)

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 41 upper division units, in a prescribed course sequence, to include Social Work 350, 360, 361, 370A, 381, 382, 483A-483B, 489A (4 units), 489B (4 units), 491, and six units of upper division electives in social work (3 units may be taken from another department).

Prescribed Course Sequence: Students must complete all 300-level social work courses (18 units) before they will be allowed to enroll in Social Work 483A and 489A. There is no required order of the 300-level courses so they may be taken in any combination or in either Fall or Spring semesters.

JUNIOR YEAR (18 units)		SENIOR YEAR (23 units)	
SWORK 350	SWORK 360	SWORK 483A	SWORK 483B
SWORK 361	SWORK 370A	SWORK 489A	SWORK 489B
SWORK 381	SWORK 382	SWORK 491	Two Electives

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 must obtain a field application from the school office (HH-119). In order to qualify for the internship, students must have completed all 300-level social work courses. The coordinator of field instruction evaluates each application to determine whether the student has met all requirements for admission to field practicum 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.

Student Handbook

The School of Social Work has a student handbook for under-graduate 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 at SDSU. Handbooks are on sale at the Campus Store under Social Work.

Social Work Minor

The minor in social work consists of 24 units to include Psychology 101, Sociology 101, Social Work 110, 120, 350, 360, 370A, and three units selected from Social Work 351, 400, 410, or 420.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Human Services Paraprofessional Certificate

This certificate is designed specifically for individuals in recovery from any form of substance abuse who wish to pursue paraprofessional career opportunities in this field. A certificate in paraprofessional human services may be sought by ex-offenders and ex-substance abusers who: (a) do not meet the prerequisite requirements for a major in social work for the B.A. degree, but who are interested in pursuing a paraprofessional career in human services; (b) are not interested in or able to complete nonprofessional offerings which are part of the regular degree program; (c) have already earned a bachelor's degree and are not interested in a second degree.

Students are admitted to the certificate program as regular students of San Diego State University. Students must apply to the program as well as to the university. Candidacy for the certificate program will be established by the undergraduate social work program adviser.

Awarding of the certificate requires completion of an approved pattern of ten courses (30 units) with a minimum grade point average of 2.0. The following is the prescribed 30-unit course sequence for the certificate:

SEMESTER 1 (15 units)	SEMESTER 2 (15 units)
Community Health Education 574	Community Health Education 331
Social Work 360	Social Work 350
Social Work 381	Social Work 370A*
Social Work 410*	Social Work 382
Social Work 489A*	Social Work 489B*

* Prerequisites waived for these courses.

Course offerings under this program may only be taken in the on-campus program. Fifteen units in the certificate program may be counted toward the major in social work, but may not be counted toward the minor. For further information, consult the undergraduate social work program adviser.

Courses

LOWER DIVISION COURSES

110. Social Work Fields of Service (3) I, II

Fields of services in which social workers perform professional roles. Focus on social work approach to intervention in practice and policy arenas.

120. Introduction to Social Work (3) I, II

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.

130. Contemporary Human and Helping Relationships (3) I, II

Positive and negative dimensions of human relationships and how they can require social work intervention through helping process. Develop students' understanding of themselves in helping relationship.

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)

350. Cultural Pluralism (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations 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.

351. Perspectives on Life in Urban Communities (3) I, II

Characteristics and processes of contemporary urban communities as they shape the lifestyles of people. Urban communities examined in terms of their functional and dysfunctional capacities for meeting human needs.

360. Perspectives on Human Behavior and the Social Environment (3) I, II

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

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.

370A. Social Policies and Social Issues (3) I, II

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.

370B. Social Provision and Program Evaluation (3) I, II

Issues and dilemmas related to the provision of social services, and analysis of social programs. Evaluating effectiveness and efficiency of social service programs and social work services.

381. Practice Skills Micro (3) I, II

Prerequisites: Completion of social work preparation for the major. Junior standing.

Micro skills within overall generalist practice framework. Written and verbal communication, interviewing, assessment with individuals and small groups.

382. Practice Skills Macro (3) I, II

Prerequisite: Completion of social work preparation for the major. Junior standing.

Development of social work practice skills at macro level. Written and verbal communication needs assessment and resource development with organizations and communities.

400. Social Work Practice: Child Welfare (3) I, II

Prerequisite: Social Work 370A.

Problems of children and supportive, supplementary and substitute social services which have been developed to meet these needs.

410. Social Work Practice: Family Issues (3) I, II

Prerequisite: Social Work 370A.

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.

420. Aging and the Social Services (3) I, II

Prerequisite: Social Work 370A.

Contemporary status, social problems and needs, and developmental theories of the elderly population. Social services delivery system which serves the elderly.

483A. Generalist Social Work Practice I (3) I, II

Prerequisites: Completion of social 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.

483B. Generalist Social Work Practice II (3) I, II

Prerequisites: Social Work 483A, 489A, and concurrent registration in Social Work 489B.

Integrating seminar with emphasis on macro generalist practice theory, principles, and methods.

489A-489B. Field Experience in Social Work (3-9, 3-9) Cr/NC I, II

Prerequisites: Completion of all 300-level social work courses; Social Work 381 with a grade of C or better and consent of instructor; concurrent registration in Social Work 483A for 489A; concurrent registration in Social Work 483B for 489B; arrangements made during prior semester with coordinator of field instruction.

A minimum of 12 units (6 in Social Work 489A and 6 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.

491. Methods of Social Work Research (3) I, II

Prerequisite: Social Work 370B.

Definition and purpose of research in social welfare and social work. Formulation of research problems, selecting a design and methodology; techniques of collecting, organizing, interpreting and analyzing data.

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.

497. Investigation and Report (3) I, II

Prerequisite: Consent of instructor.

Analysis of special topics in social welfare.

499. Special Study (1-3) Cr/NC I, II

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

**UPPER DIVISION COURSE
(Also Acceptable for Advanced Degrees)**

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. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

**GRADUATE COURSES
Refer to Bulletin of the Graduate Division.**

Sociology

In the College of Arts and Letters

OFFICE: Nasatir Hall 203

TELEPHONE: (619) 594-5449 / FAX: (619) 594-1325

EMAIL: msannwal@mail.sdsu.edu

WWW: <http://www-rohan.sdsu.edu/dept/sdsusoci/sociology.html>

Faculty

Emeritus: Bloomberg, DeLora, El-Assal, Gillette, Johnson, Milne, Mouratides, Sandlin, Schulze, Somerville, Sorensen, Stephenson, Wendling, Werner

Chair: Wood

Professors: Cottrell, Emerick, Hohm, Hough, Ima, Kolody, Preston, Scheck, Winslow, Wood

Associate Professors: Buck, Chandler, Gay, Kennedy, Kirkpatrick

Assistant Professors: Liu, Pershing

Lecturers: Clanton, Eaton, Johnston, Sargent

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 scientific study of social life and the social causes and consequences of human behavior. Sociology's subject matter ranges from the intimate family to the hostile mob, from crime to religion, from the divisions of race and social class to the shared beliefs of a common culture, from the sociology of work to the sociology of sport. In fact, few fields have such broad scope and relevance.

Sociology seeks to understand the interaction of individuals with institutions and social organizations in which we are inextricably involved, and the norms, values, beliefs, and traditions that make social life possible and meaningful.

The Department of Sociology offers its majors a field internship program, which allows students to gain hands-on experience selected from a wide variety of community agencies and private business organizations. Many students have found permanent employment through their internships.

Employment opportunities for individuals with B.A. degrees in sociology are, as for all liberal arts graduates, quite varied. Many students work for various private and public agencies; some go on to graduate work in sociology; others go on to other graduate programs such as law, medicine, and social work. Sociologists with M.A. and Ph.D. degrees are generally employed at colleges and universities or government agencies. However, a growing number of sociologists with graduate degrees are being employed by private businesses.

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.

Sociology Major

With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 22081)

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, 150, 201. (9 units)

Foreign 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 section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Writing Examination or Sociology 396W with a grade of C (2.0) or better.

Major. Students may elect to major in one of four tracks: (a) General Sociology, (b) Applied Social Research, (c) Sociology of the Workplace or (d) Social Problems. The Applied Social Research track provides a more rigorous preparation in sociological research methods and students completing this course of study receive a special certificate at graduation. The Sociology of the Workplace track is specifically designed for students interested in personnel and management. The Social Problems track focuses upon sociological theory as applied to the study of crime, juvenile delinquency, mental illness, minority group relations, sex/gender roles, inequality, human sexuality, and other issues. Within these four tracks, upper division course requirements for the sociology major are as follows:

(a) General Sociology

A minimum of 30 upper division units in sociology to include Sociology 301, six units of electives, plus:

Three units from *each* of the following areas:

Methods: Sociology 406, 407, 408.

Social Psychology: Sociology 310, 410, 412, 441, or 517.

Theory: Sociology 401 or 403.

Twelve units from *one* of the following areas:

Family, Sexuality, and the Life Cycle: Sociology 320, 420, 421, 522, 527.

Social Change: Sociology 350, 355, 450, 455, 456, 457, 555, 556, 557.

Social Control: Sociology 441, 443, 444, 445, 543.

Social Organization: Sociology 335, 338, 430, 433, 436, 531, 532, 537, 539.

No more than three units of Sociology 499 or 597 and six units of Sociology 496 or 596 may be applied toward the General Sociology track.

(b) Applied Social Research

A minimum of 30 upper division units in sociology to include Sociology 301, 406, 407, 408, and 505 (15 units), plus:

Three units from each of the following areas:

Internship: Sociology 480.

Social Psychology: Sociology 310, 410, 412, 441, or 517.

Theory: Sociology 401 or 403.

Six units of electives in sociology excluding Sociology 499 or Sociology 597.

(c) Sociology of the Workplace

A minimum of 30 upper division units in sociology to include Sociology 301, 320, 355, 430, 480, 531, 532 (21 units), plus:

Three units from each of the following areas:

Social Psychology: Sociology 310, 410, 412, 441, or 517.

Theory: Sociology 401 or 403.

Three units of electives in sociology excluding Sociology 499 or Sociology 597.

(d) Social Problems

A minimum of 30 upper division units in sociology to include Sociology 301 and 18 units selected from Sociology 320, 350, 352, 355, 420, 421, 433, 436, 441, 443, 444, 445, 457, 480, 539, 543, 556, 557, and three units from **each** of the following areas:

Methods: Sociology 406, 407, or 408.

Social Psychology: Sociology 310, 410, 412, 441, or 517.

Theory: Sociology 401 or 403.

Sociology Minor

The minor in sociology consists of a minimum of 18 units to include Sociology 101 and 150 or 201; three units selected from Sociology 310, 410, 412, 441, or 517; and nine units selected from one of the following areas:

Applied Social Research: Sociology 301 and 505 required; and three units selected from 301, 406, 407, 408.

Family, Sexuality, and the Life Cycle: Sociology 320, 420, 421, 522, 527.

Sociology of the Workplace: Sociology 320, 355, 430, 480, 531, 532.

Social Change: Sociology 350, 355, 450, 455, 456, 457, 555, 556, 557.

Social Control: Sociology 441, 443, 444, 445, 543.

Social Organization: Sociology 335, 338, 430, 433, 436, 531, 532, 537, 539.

Theory and Methods: Sociology 301, 305, 401, 403, 406, 407, 408, 505.

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. Sociology 490, Senior Honors Thesis, is open to students who rank in the top twenty percent of senior sociology majors and who have successfully completed Sociology 396W. Interested students should consult with the undergraduate advisers in the Sociology Department.

Courses

LOWER DIVISION COURSES

101. Introductory Sociology: The Study of Society (3) I, II (CAN SOC 2)

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.

150. Introduction to Social Problems (3) I, II (CAN SOC 4)

Prerequisite: Sociology 101.

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.

201. Elementary Social Statistics (3) I, II

Prerequisites: Course in intermediate algebra. Sociology 101; satisfaction of the Entry Level Mathematics requirement; and qualification on the Mathematics Departmental Placement Examination, Part IA.

Basic statistical techniques in sociology. Tables and graphs, measures of central tendency and variability, correlations, cross-classification, and introduction to multivariate analysis, sampling and statistical inference. Computer applications may be included. Students with credit or concurrent registration in the following lower division statistics courses will be awarded a total of four units for the two (or more) courses: Sociology 201; Biology 215; Civil and Environmental Engi-

neering 160; Economics 201; Political Science 201; Psychology 270; Statistics 119, 250.

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)**

301. Introduction to Social Research (3)

Prerequisite: Sociology 101.

Sociological research methodology. Techniques for testing and developing sociological theory, including hypothesis formulation, data collection, data analysis and writing a research report.

305. Sociological Laboratory II (1)

Three hours of laboratory.

Prerequisite: Must be taken in conjunction with a three-unit upper division course.

Application of experimental, quantitative or qualitative methods to sociological problems and the use of experimental, social simulation teaching techniques.

310. Love, Jealousy, and Envy: The Sociology of Emotions (3)

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 from a sociological point of view.

320. Sex/Gender Roles in American Society (3) I, II

Prerequisites: Sociology 101; and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors.

Male-female relationships in occupational, educational, and familial settings. Changing concepts of femininity and masculinity. Images of men and women in literature, in the mass media, and in laws and judicial decisions.

335. Mass Communication and Popular Culture (3)

Prerequisites: Sociology 101, and completion of the General Education requirement in Foundations 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.

338. Sociology of Religion (3)

Prerequisites: Sociology 101 and completion of the General Education requirement in Foundations 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 society. Secularization and conversion processes in modern industrial societies.

350. Population and Contemporary Issues (3)

Prerequisites: Sociology 101; and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors.

Analysis of population processes as they affect and are affected by such contemporary issues as rapid world population growth, famine, ecological pressures, abortion, women's liberation, racial and ethnic relations, and illegal migration.

352. Contemporary Social Problems (3)

Prerequisites: Sociology 101, and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors.

Contemporary social problems in North America and other areas of the world.

355. Minority Group Relations (3) I, II

Prerequisites: Sociology 101; and completion of the General Education requirement in Foundations 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.

396W. Writing in Sociology (3)

Prerequisites: Satisfies University Upper Division Writing requirement for students who have completed 60 units, fulfilled the Writing Competency requirement, and completed the General Education requirement in Communication and Critical Thinking. **Proof of completion of prerequisites required:** Test scores or verification of exemption; copy of transcript. Recommended: Sociology 101.

Instruction and practice in methods of writing in the social sciences. Principles of scientific discourse, research and report writing, and proposal writing.

401. Classical Sociological Theory (3) I

Prerequisite: Sociology 101.

Theories of major European and American sociologists since the mid-nineteenth century, including Comte, Marx, Tocqueville, Spencer, Sumner, Durkheim, Pareto, Weber, Simmel, Mead, and Park. Relevance of classical social theory to contemporary sociology.

403. Contemporary Sociological Theory (3) II

Prerequisite: Sociology 101.

Major figures and trends in American and European sociological theory since World War II, with emphasis on such schools as structural-functionalism, Marxism, symbolic interactionism, and critical theory.

406. Intermediate Social Statistics (3)

Prerequisites: Sociology 201 and 301.

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.

407. Survey and Experimental Research Methods (3)

Prerequisites: Sociology 201 and 301.

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.

408. Qualitative Research Methods (3)

Prerequisites: Sociology 201 and 301.

Field research methods including interviewing, observation, participant observation and case studies. Problems in research design, gaining and maintaining rapport, and analysis and interpretation of qualitative data.

410. Social Psychology: Mind, Self, and Society (3)

Prerequisites: Sociology 101; and completion of the General Education requirement in Foundations 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.

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.

420. Sexuality in Modern Society (3) I, II

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.

421. The American Family and Its Alternatives (3)

Prerequisites: Sociology 101; and completion of the General Education requirement in Foundations 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 realities and future prospects.

430. Social Organization (3)

Prerequisites: Sociology 101; and completion of the General Education requirement in Foundations II.B., Social and Behavioral Sciences required for nonmajors.

Social structure analyzed from the micro-level of roles and interaction to groups, institutions, complex organizations, societies, and the world as a social system. Basic concepts of sociology and their application in concrete case studies.

433. Wealth, Status, and Power (3)

Prerequisite: Sociology 101.

Distribution of wealth, power, privilege, and prestige in society. Causes, outcomes, and dynamics of inequality. Processes of upward and downward social mobility. Relationship of social class to politics, the economy, and other institutions.

436. Sociology of Health and Illness (3)

Prerequisite: Sociology 101.

Sociological perspectives on health, disease, and healing. Socialization, roles, conflict, and change in medical work settings. Health and medical institutions in comparative social contexts. Social transformation of American medicine.

441. Sociology of Mental Illness (3)

Prerequisite: Sociology 101.

Social, cultural, and political factors involved in definition of "madness" and control of mental illness in various societies. Review of research about the incidence, prevalence, and social ecology of mental illness and its distribution by social class.

443. Crime and Society (3) I, II

Prerequisite: Sociology 101.

Social origins, forms, and functions of criminal law. Sociological theories about the causes and consequences of crime. Measurement and distribution of violent crimes, property crimes, victimless crimes, white collar crime, and their impact on society.

444. Juvenile Delinquency (3) I, II

Prerequisite: Sociology 101.

Nature and extent of delinquency; the causative factors involved; methods of control and prevention, with special attention to protective and remedial measures offered by the school, home, juvenile court, correctional institutions and camps, probation and parole, and recreational agencies.

445. Sociology of Deviance (3) I, II

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.

450. Social Change (3)

Prerequisites: Sociology 101; and completion of the General Education requirement in Foundations 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.

455. Asian American Communities (3)

Prerequisite: Sociology 101.

Comparative analysis of selected Asian and Pacific Islander communities in the United States. Entrance, reception, response, and adaptation. Assessment of public policies of current issues and future prospects.

456. Collective Behavior: Crowds, Cults, and Crazes (3)

Prerequisite: Sociology 101.

Processes of social behavior in masses and groups, including crowd behavior, mass hysteria, riots, mobs, fads, fashions, crazes, panics, rumors, and scapegoating. Sects and cults; social movements; the effects of mass communications and propaganda.

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.

480. Field Internship (3-6) I, II

Prerequisite: Sociology 101.

Supervised field placement of students in community agencies. Practical experiences related to studies within the sociology curriculum. Maximum credit six units.

490. Senior Honors Thesis (3) I, II

Prerequisites: Sociology 396W; open to sociology majors with senior standing and permission of the honors thesis adviser.

Directed research on a sociological topic chosen in consultation with the honors adviser, and completion of a senior honors thesis. Required of students wishing to graduate with a Certificate of Recognition in Sociology with Honors.

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.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

505. Applied Sociological Research (3)

Prerequisite: Sociology 407 or 408.

Types and methods of applied sociological research; and an overview of their application in substantive areas. Practical research skills.

517. Life Crises and Coping: Sociological Perspectives (3)

Prerequisite: Sociology 101.

Social variation in the occurrence of life crises, personal and social coping strategies, and psychosocial outcomes.

522. The Family in Comparative and Historical Perspectives (3)

Prerequisite: Sociology 101. Recommended: Sociology 421.

Comparative study of selected family systems in the past and present. Family and parafamily forms in intentional communities of the nineteenth century compared with contemporary communal experiments. Ethnic and class differences in family organization.

527. Aging and Society (3)

Prerequisite: Sociology 101.

Status and roles of men and women in the second half of the life cycle. Ethnic, sex and class variables in aging. Cross-cultural comparisons of occupational, educational, familial, recreational and political opportunities for the aging.

528. Death and Dying (3)

Prerequisite: Sociology 101.

Sociological concepts and theories of the process of dying. Comparative study of death and dying with emphasis on social, psychological and social organization approaches. Consideration of contemporary social-ethical issues surrounding dying in our society.

531. Working and Society (3)

Prerequisite: Sociology 101.

Work and occupations in the division of labor. Paid and unpaid labor; work at home and in the marketplace. The social drama of work: identity, role conflict, and change. Power, pay, and status ranking of occupations: the professionalism of work.

532. Workers, Managers, and Bureaucracy (3)

Prerequisite: Sociology 101.

Sociology of work in formal organizations. From classic theories on division of labor, industrial capitalism, and bureaucracy, to transformation of work in the twentieth century. Experiences of workers and managers in the U.S. and other societies.

537. Political Sociology (3)

Prerequisite: Sociology 101.

Social organization of political processes. Power and authority, social class, primary groups, collective behavior, social change, and other sociological factors considered in their relationships to political processes.

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.

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.

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.

556. Topics in Comparative Societies (3)

Prerequisite: Sociology 101.

Social structures, social problems, and social change in selected areas of the world in comparative and historical perspectives. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

557. Urban Sociology (3)

Prerequisite: Sociology 101.

The structure and function of the modern city; types of neighborhoods; forms of recreation; social forces in a metropolitan area; types of urban personalities and groups; rural-urban conflicts of culture. Practical field studies required.

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. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

597. Investigation and Report (3) I, II

Prerequisites: Fifteen units in sociology and consent of instructor.

Analysis of special topics in sociology. Maximum credit six units.

**GRADUATE COURSES
Refer to Bulletin of the Graduate Division.**

Spanish

In the College of Arts and Letters

OFFICE: Business Administration 403

TELEPHONE: (619) 594-6588

FAX: (619) 594-5293

Faculty

Emeritus: Case, Castro (Castillo), Head, Jiménez-Vera, Lemus, Sender, Talamantes, Weeter

Chair: Higgs

Professors: Barrera, Christensen, Hidalgo, Higgs, Robinson, Segade, Silverman, Wilson

Associate Professors: O'Brien, Young

Assistant Professor: Borrás

Offered by the Department of Spanish and Portuguese Languages and Literatures

Master of Arts degree in Spanish.

Major in Spanish with the B.A. degree in liberal arts and sciences.

Teaching major in Spanish for the single subject teaching credential in foreign languages.

Major in international business, with emphasis in Spanish. **See** International Business.

Minor in Spanish.

Certificate in court interpreting (available at Imperial Valley Campus only).

Certificate in translation studies.

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 Spanish-speaking countries, many students here are interested in learning Spanish. Their reasons range from practical application in jobs, travel, reading or recreation to a curiosity about the culture or literature of Spanish-speaking countries. The Department of Spanish and Portuguese offers a wide range of courses and programs designed to satisfy the varied needs of students who enter the Spanish major.

A major in Spanish for the single subject teaching credential can lead directly to a career in secondary teaching. The federal government also employs those with Spanish-speaking ability in both civil service and diplomatic areas. In addition, many fields which involve contact with the public require knowledge of Spanish. These types of public contact fields include law enforcement, medicine, banking, tourism, government, library positions, foreign affairs, public relations, advertising, missionary assignments, 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.

Spanish Major

With the B.A. Degree in Liberal Arts and Sciences (Major Code: 11051)

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 Spanish courses can apply to the degree.

Students majoring in Spanish must complete a minor in another field approved by the departmental adviser in Spanish.

Preparation for the Major. Spanish 101, 102, 103, 202, 211, and 212. Spanish 281 replaces 103 and 211 and Spanish 282 replaces 202 and 212 for U.S. Hispanics. 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. (14-22 units)

Foreign Language Requirement. The foreign language requirement for graduation is automatically fulfilled through coursework for preparation for the major.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 27 upper division units in Spanish to include Spanish 301, 302 (Spanish 381 replaces 301 and 302 for Spanish speakers); six units selected from Spanish 405A, 405B, 406A, 406B; Spanish 340 or 341 or 342; Spanish 448 or 449; Spanish 350; two electives from 300 to 500 level Spanish courses. At least 15 upper division units must be taken in residence at SDSU. Students who have successfully completed courses for upper division credit may not receive credit for lower division courses.

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)

All candidates for a teaching credential must complete all requirements as outlined in this section of the catalog under Policy Studies 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 policy studies 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 Spanish is required for the degree.

Preparation for the Major. Spanish 101, 102, 103, 202, 211, and 212. Spanish 281 replaces 103 and 211 and Spanish 282 replaces 202 and 212 for U.S. Hispanics. 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. (14-22 units)

Foreign Language Requirement. The foreign language requirement for graduation is automatically fulfilled through coursework for preparation for the major.

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 30 upper division units in Spanish to include Spanish 301, 302 (Spanish 381 replaces 301 and 302 for Spanish speakers); six units selected from 405A, 405B, 406A, 406B; Spanish 340 or 341 or 342; Spanish 448 or 449; Spanish 350 and 561; two electives from 300 to 500 level Spanish courses. At least 15 upper division units must be taken in residence at SDSU. Students who have successfully completed courses for upper division credit may not receive credit for lower division courses.

Spanish Minor

The minor in Spanish consists of a minimum of 18-19 units, at least twelve of which must be in upper division Spanish courses.

Courses in the minor may not be counted toward the major, but may be used to satisfy preparation for the major and general education requirements, if applicable. A minimum of six upper division units must be completed in residence at San Diego State University.

Certificate in Translation Studies

The Department of Spanish and Portuguese Languages and Literatures offers a Certificate in Translation Studies. The certificate requires 15 units in Spanish dealing with translation theory, nonliterary and literary translation, from Spanish to English and from English to Spanish.

A prospective candidate for the certificate should possess a bilingual facility in Spanish and English. The student must complete with a grade of B or better Rhetoric and Writing Studies 305W (or pass the University Upper Division Writing Competency Examination), and Spanish 301, 302, and 350 prior to starting work on 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, 556, and three units from Spanish 307, 495, 497, and either 499 or 596 when offered with appropriate certificate-related content.

Upon completing the 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. Courses in the certificate may not be counted toward the major or minor in Spanish.

Certificate in Court Interpreting

(Imperial Valley Campus)

The Imperial Valley Campus offers a Certificate in Court Interpreting. The certificate requires 15 units in Spanish dealing with problems of court interpreting and includes interpreting from Spanish to English and from English to Spanish.

A prospective candidate for the certificate should possess a bilingual ability in Spanish and English. The student must complete with a grade of B or better Rhetoric and Writing Studies 305W (or pass the University Upper Division Writing Competency Examination), and Spanish 301, 302, and 350 prior to starting work on 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, 493, 556, and either 499 or 596 when offered with appropriate certificate-related content.

Upon completing the 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. Courses in the certificate may not be counted toward the major or minor in Spanish.

Foreign Language Requirement for the B.A. Degree in Liberal Arts and Sciences

Students electing the study of Spanish to fulfill the foreign language requirement for the Bachelor of Arts degree in liberal arts and sciences must successfully complete Spanish 103 or the equivalent level of achievement. The usual sequence of coursework is Spanish 101, 102, and 103. 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 foreign 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, although students with fewer than three years of high school level language may complete the first semester college course for graduation credit.

2. The first *three years* of high school level language count as the equivalent of the first two college semesters, although students with fewer than four years of high school level language may complete the second semester college course for graduation credit. Students who have completed three years of foreign language in high school will not receive credit for the first semester college course unless at least five years separate the last high school course and the first college course.

3. *Four years* of high school level language count as the equivalent of three college semesters or five college quarters, thus fulfilling the foreign 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 103 and 211. The continuation placement level with this score is Spanish 202 and/or 212. Credit will not be awarded for lower numbered Spanish courses (101, 102).

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, 103, 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 foreign 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

LOWER DIVISION COURSES

Native speakers of Spanish with a high school diploma or equivalent from a country whose language of instruction is Spanish will not receive credit for lower division Spanish courses.

Any student without a high school diploma from the U.S. **OR** a Spanish speaking country, but who has taken an English as a Second Language (ESL) class (high school or college) will not receive credit for lower division Spanish completed at SDSU or another college.

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, 103, 202, 301 taken out of sequence.

101. Introduction to Spanish I (4)

Four hours of lecture plus laboratory.

Pronunciation, oral practice, readings on Hispanic culture and civilization, essentials of grammar. Not open to students who have completed three years of high school Spanish unless the third course was completed five or more years ago. Not open to students with credit in Spanish 102, 103 or 202.

102. Introduction to Spanish II (4)

Four hours of lecture plus laboratory.

Prerequisite: Spanish 101 or two years of high school Spanish.

Continuation of Spanish 101. Not open to students who have completed four years of high school Spanish unless the fourth course was completed five or more years ago. Not open to students with credit in Spanish 103 or 202 or higher.

103. Introduction to Spanish III (4)

Four lectures plus laboratory.

Prerequisite: Spanish 102.

Continuation of Spanish 101 and 102. Not open to students who have completed five years of high school Spanish unless the fifth course was completed five or more years ago. Not open to students with credit in Spanish 202 or higher. (Formerly numbered Spanish 201.)

202. Intermediate (4) I, II, S

Prerequisite: Spanish 103.

Review of selected grammatical features supported by study of cultural materials. Emphasis on written and spoken language. Conducted in Spanish. Not open to students with credit in Spanish 282.

211. Intermediate Conversation and Reading (3) I, II, S

Prerequisite: Spanish 102.

Emphasis on oral communication and reading comprehension through intermediate level cultural materials. Some writing will be adjunct to reading. Conducted in Spanish. May be taken concurrently with Spanish 103.

212. Intermediate Conversation and Writing (3) I, II, S

Prerequisite: Spanish 103 or 211.

Emphasis on oral communication and intermediate level writing in Spanish. Conducted in Spanish. May be taken concurrently with Spanish 202.

281. Intermediate Spanish for U.S. Hispanics (3)

Prerequisites: Exposure to Spanish in the home and neighborhood in the U.S. Must take departmental diagnostic examination.

Introduction to written Spanish: orthography, spelling, basic sentence construction, vocabulary enrichment, complex and compound sentence construction, basic principles of writing. Not open to native speakers (with high school diploma from a Spanish speaking country) or students with credit in Spanish 103 or 211 or higher numbered Spanish courses. Replaces Spanish 103 and 211 for Preparation for the Major.

282. Intermediate Spanish for U.S. Hispanics (3)

Prerequisite: Spanish 281 or score on departmental diagnostic examination.

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 or 212 or higher numbered Spanish courses. Replaces Spanish 202 and 212 for Preparation for the Major.

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.

297. Reading Spanish for Graduate Students (3) II Cr/NC

Prerequisite: Limited to graduate students.

Techniques of reading expository and critical material for graduate students who have a foreign language requirement.

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.

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. Conducted in Spanish. May be taken concurrently with Spanish 302. Not open to students with credit in Spanish 381.

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. Conducted in Spanish. May be taken concurrently with Spanish 301. Not open to students with credit in Spanish 381.

307. Introduction to Commercial Spanish (3) I

Prerequisite: Spanish 301, 302, or 381.

Terminology and forms of business correspondence and documents.

340. Spanish Civilization (3)

Prerequisites: Spanish 301, 302, or 381; and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

Spanish culture of the past and present, with emphasis on literature, philosophy and the arts. Not open to students with credit in Humanities 350.

341. Spanish American Civilization (3)

Prerequisites: Spanish 301, 302, or 381; and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

Spanish American cultures, with emphasis on literature, philosophy and the arts.

342. Mexican Civilization (3)

Prerequisites: Spanish 301, 302, or 381; and completion of the General Education requirement in Foundations 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.

350. Advanced Grammar (3)

Prerequisites: Spanish 301 and 302 or 381.

Significant systematic features of modern Spanish grammar. Required for credential applicants.

381. Advanced Spanish for Spanish Speakers (3)

Prerequisite: Spanish 282, or native speaker status (high school diploma from Spanish speaking country), or departmental diagnostic examination.

Continuation of Spanish 282. Advanced course for Spanish speakers focusing on advanced language structures and readings. Students are required to write a minimum of six graded compositions and a research paper in Spanish. Replaces Spanish 301 and 302 for the Spanish major. Spanish 381 not open to students with credit in either Spanish 301 or 302.

405A-405B. Survey Course in Spanish Literature (3-3)

Prerequisites: Spanish 301 and 302 or 381; and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

Important movements, authors and works in Spanish literature from the Middle Ages to the present.

406A-406B. Survey of Spanish American Literature (3-3)

Prerequisites: Spanish 301 and 302 or 381; and completion of the General Education requirement in Foundations II.C., Humanities required for nonmajors.

Reading from representative Spanish American authors during colonial, revolutionary, and modern periods.

448. Spanish Linguistics (3) I, II, S

Prerequisites: Spanish 301 and 302 or 381.

Structural, historical, and applied Spanish linguistics.

449. Phonetics and Phonemics (3) I, II, S

Prerequisites: Spanish 301 and 302 or 381.

Sounds of Spanish, and Spanish phonemic systems. Problems involved in teaching of Spanish pronunciation to English-speaking students.

491. Introduction to Translation Studies (3) I

Prerequisites: Spanish 350 and satisfaction of the University Upper Division Writing requirement.

Theoretical grounding and practical problems of literary and nonliterary translation; linguistic and cultural obstacles; literary, legal, commercial, medical, social services lexicons in context.

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.

493. Advanced Spanish-English/English-Spanish Translation (3) I, II

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).

495. Internship in Translation and Interpretation (3) I, II

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.

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.

497. Advanced Commercial Spanish (3) II

Prerequisites: Six units from Spanish 301, 302, or 381 and Spanish 307.

Terminology and techniques used in commercial transactions, including interpretation and writing of business materials.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units. This course is intended only for students who are currently enrolled in or who already have credit for all upper division courses in Spanish available in any given semester.

UPPER DIVISION COURSES (Also Acceptable for Advanced Degrees)

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, theater) 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.

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, theater) 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.

515. Mexican Literature (3)

Prerequisites: Spanish 406A-406B.

Mexican literature from the Romantic period to the present. Special emphasis placed on contemporary era.

520. Caribbean Area Countries Literature (3)

Prerequisites: Spanish 406A-406B.

Literature of Caribbean Islands, Central America, Colombia and Venezuela, from colonial period to present. Special emphasis on contemporary era.

522. Andean Countries Literature (3)

Prerequisites: Spanish 406A-406B.

Literature of Ecuador, Peru, Bolivia, and Chile from the period immediately preceding the Spanish conquest to the present.

556. Translation of Literary Works: A Critical Comparison (3)

Prerequisite: Spanish 493.

Techniques and methods of translating literary texts from English to Spanish and Spanish to English; textual and stylistic problems in different periods, genres, and dialects, with emphasis on contemporary literature.

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. Not open to students with credit or concurrent enrollment in French 561.

572. Spanish American Theater (3) (Offered only at IVC)

Prerequisites: Spanish 406A-406B.

Principal Spanish American dramatists and movements. Special emphasis on contemporary era.

581. Mexican and Chicano Sociolinguistics (3)

Prerequisites: Spanish 340; and Spanish 448 or 449.

Language issues encountered in both Mexico and U.S. Southwest. Bilingualism, diglossia, language attitudes and bilingual education studied in sociohistorical perspective using concepts and methods advanced by sociology of language.

596. Selected Studies in Spanish (3)

Prerequisite: Spanish 302 or 381.

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 of six units of 596 applicable to a bachelor's degree. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES Refer to Bulletin of the Graduate Division.

Special Education

In the College of Education

OFFICE: North Education 70

TELEPHONE: (619) 594-6665

WWW: <http://edweb.sdsu.edu/sped/sped.html>

Accredited by the California Commission on Teacher Credentialing.

Faculty

Emeritus: Brady, Doorlag, Forbing, McClard, Singer

Chair: Lynch

Professors: Cegelka, Graves, Kitano, Lewis, Lynch

Associate Professor: Hall

Assistant Professors: Beard, Valles

Offered by the Department

Master of Arts degree in education.

Education specialist credentials in special education.

Certificate in bilingual (Spanish) special education (refer to *Bulletin of the Graduate Division*).

Certificate in developing gifted potential (refer to *Bulletin of the Graduate Division*).

Certificate in early childhood special education (refer to *Bulletin of the Graduate Division*).

Certificate in teaching the emotionally disturbed/behaviorally disordered (refer to *Bulletin of the Graduate Division*).

Resource specialist certificate of competence (refer to *Bulletin of the Graduate Division*).

Supported employment and transition specialist certificate (refer to *Bulletin of the Graduate Division*).

Courses

UPPER DIVISION COURSES (Intended for Undergraduates)

397. Problems in Education (Credit to be arranged) I, II (Offered only in Extension)

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.

470. Special Education Applications (2 or 3) Cr/NC

One lecture and two or four hours of activity.

Prerequisite: Consent of instructor.

Procedural applications in educational and/or community programs for students with exceptionalities.

496. Selected Topics in Special Education (1-4) I, II, S

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.

499. Special Study (1-3) I, II

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)

500. Human Exceptionality (3) I, II, S

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.

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.

502. Field Experiences in General and Special Education (1)

Three hours of observation/ participation per week.

Prerequisites: Concurrent registration in Special Education 501.

Observation and participation in general and special education classrooms and related school activities for students with disabilities

505. Educational Services for Students with Serious Emotional Disturbance (1)

Prerequisites: Admission to credential program.

Educational needs and services for students with serious emotional disturbance. Classroom interventions and procedures.

508. Characteristics and Identification of Students Who are Gifted and Talented (3)

Historical and theoretical foundations, alternative and critical perspectives, characteristics and needs, identification models for a diverse society.

510. Adapting Communication Systems for Students with Severe Disabilities (1)

Prerequisites: 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.

524. Characteristics and Education of Students with Mild/Moderate Disabilities (3) I

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.

525. Characteristics and Education of Students with Moderate/Severe Disabilities (3) I

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.

526. Characteristics and Education of Students with Physical, Health, and Sensory Impairments (3)

Prerequisite: Special Education 500.

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.

527. Special Education in a Pluralistic Society (3)

Prerequisites: Education 451; 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.

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.

529. Characteristics and Education of Students with Serious Emotional Disturbances (3) I

Prerequisites: Special Education 500 and 501.

Historical and philosophical perspectives of programs for students with emotional disturbances and behavior disorders, including review of research on student characteristics, educational programs, and curricular approaches.

532. Service Coordination for Infants and Toddlers with Disabilities (2)

Prerequisite: Special Education 528.

Skills and strategies for educators who coordinate services for young children with disabilities and their families. Children with low incidence disabilities and coordination with their primary service providers.

534. Classroom Assessment of Students with Mild/Moderate Disabilities (2)

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.

535. Social Networks and Supports for Individuals with Moderate/Severe Disabilities (1)

Prerequisite: Special Education 525 and a minimum of nine units in a credential program.

Developing and maintaining social support networks in the classroom and community for individuals with moderate/severe disabilities. Theoretical, conceptual, and empirical bases for implementation models.

553. Behavioral Strategies and Supports for Students with Disabilities (3)

Prerequisites: Special Education 500 and 501.

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.

560. Applications of Technology for Individuals with Disabilities (3) I, II, S

Prerequisite: Special Education 500.

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.

570. Individualized Special Education Program Plans (1)

Prerequisite: Concurrent registration in Special Education 980.

Components of individualized education program plans, individualized family service plans, and individualized transition plans. Goals, objectives, and outcomes for program planning. Legal and ethical considerations.

596. Selected Topics in Special Education (1-4) I, II, S

Specialized study of selected topics in special education. May be offered as either a workshop or lecture/discussion. See Class Schedule for specific content. Maximum credit of six units of 596 applicable to a master's degree. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

GRADUATE COURSES
Refer to Bulletin of the Graduate Division.

Speech Communication

Refer to "Communication" in this section of the catalog.

Statistics

In the College of Sciences

OFFICE: Business Administration/Mathematics 203

TELEPHONE: (619) 594-6191

Faculty

Emeritus: Bell, Burdick, Macky, Moser, Romano

Chair: Elwin

Coordinator for Statistics: Lui

Professors: Golbeck, Lui, Park

Associate Professors: Kelly, Steffey

Offered by the Department of Mathematical and Computer Sciences

Master of Science degree in statistics.

Master of Science degree in statistics with concentration in biostatistics.

Major in statistics with the B.S. degree in applied arts and sciences.

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.

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.

Statistics Major

With the B.S. Degree in Applied Arts and Sciences

(Major Code: 17021)

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 an upper division writing requirement and must complete a minimum of 61 units of coursework as described below.

Preparation for the Major. Statistics 119 or 250; Mathematics 150, 151, 245, 252, and 254; Computer Science 106 or 107. (25 units)

Upper Division Writing Requirement. Passing the University Writing Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units to include Statistics 350A, 350B, 551A, 551B, and Mathematics 524; nine units selected (with the approval of the undergraduate adviser in statistics) from Statistics 550, 552, 553, 554A, 554B, and 555; 12 upper division units in 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).

Statistics Minor

The minor in statistics consists of a minimum of 15 units in statistics to include Statistics 250 (or equivalent), 350A, 350B or 554A, and six units of upper division electives in statistics excluding Statistics 357. For Statistics 550, 551A, 551B, and 553, students must satisfy lower division calculus prerequisites (Mathematics 151 or 252, 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, 554A, and 554B.

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

(Intermediate algebra is prerequisite to all statistics courses.)

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.

119. Elementary Statistics for Business (3) I, II, S

Prerequisites: Satisfaction of the Entry-Level Mathematics requirement and qualification on the Mathematics Departmental Placement Examination, Part IA.

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. 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; Biology 215; Civil and Environmental Engineering 160; Economics 201; Political Science 201; Psychology 270; Sociology 201. (Formerly numbered Mathematics 119.)

250. Basic Statistical Methods (3) I, II

Prerequisites: Satisfaction of the Entry-Level Mathematics requirement and qualification on the Mathematics Departmental Placement Examination, Part IA.

Descriptive statistics: histogram, measures of central tendency and variability, sampling distributions. Estimation and hypothesis tests for means, proportions, variances. Analysis of variance models, linear regression and correlation, nonparametric methods. 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; Biology 215; Civil and Environmental Engineering 160; Economics 201; Political Science 201; Psychology 270; Sociology 201. (Formerly numbered Mathematics 250.)

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.

299. Special Study (1-3)

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

**UPPER DIVISION COURSES
(Intended for Undergraduates)**

NOTE: Proof of completion of prerequisites required for all upper division courses: Copy of transcript.

350A. Statistical Methods (3) I

Prerequisite: Statistics 119 or 250 or Biology 215.

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. The power of hypothesis tests. (Formerly numbered Mathematics 350A.)

350B. Statistical Methods (3) II

Prerequisite: Statistics 350A.

Multiple regression, factorial models and nonparametric methods, all with emphasis on applications. (Formerly numbered Mathematics 350B.)

357. Probability and Statistics (3) I, II

Prerequisite: Mathematics 150.

Probability, measures of central tendency and dispersion, characteristics of frequency functions of discrete and continuous variates; applications. Highly recommended for all prospective secondary school teachers of mathematics. (Formerly numbered Mathematics 357.)

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.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.
Individual study. Maximum credit six units.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

NOTE: Proof of completion of prerequisites required for all upper division courses: Copy of transcript.

550. Probability (3) I, II, S

Prerequisite: Mathematics 151.

Computation of probability by enumeration of cases, discrete and continuous random variables, density functions, moments, limit theorems, selected distributions. Markov chains, random walks, selected topics. (Formerly numbered Mathematics 550.)

551A. Mathematical Statistics (3) I, II

Prerequisite: Mathematics 252.

Probability models in the theory of statistics, sampling distributions with applications in statistical inference. (Formerly numbered Mathematics 551A.)

551B. Mathematical Statistics (3) II

Prerequisite: Statistics 551A.

Point and interval estimation and hypothesis testing in statistical models with applications to problems in various fields. (Formerly numbered Mathematics 551B.)

552. Sample Surveys (3) I

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. (Formerly numbered Mathematics 673.)

553. Stochastic Processes (3)

Prerequisite: Statistics 550 or 551A.

Introduction to stochastic processes with selected applications. (Formerly numbered Mathematics 553.)

554A. Computer Oriented Statistical Analysis (3) I

Prerequisite: Statistics 350A.

Using statistical computer packages such as BMDP and SAS to analyze problems in univariate ANOVA, multiple regression, contingency tables, nonparametric methods and discriminant analysis. (Formerly numbered Mathematics 554A.)

554B. Advanced Computer Oriented Statistical Analysis (3) II

Prerequisite: Statistics 554A.

Analyze problems in multivariate ANOVA, factor analysis, repeated measures, logistic regression, loglinear models, cluster analysis. Using statistical computer packages. (Formerly numbered Mathematics 554B.)

555. Multivariate Statistical Methods in Biology (3)

(Same course as Biology 597B.)

Two lectures and three hours of laboratory.

Prerequisite: Statistics 350A.

Application of multivariate statistical methods in the biological sciences. (Formerly numbered Mathematics 555.)

596. Advanced Topics in Statistics (1-4) I, II

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. Maximum combined credit of six units of 596 and 696 applicable to a 30-unit master's degree.

**GRADUATE COURSES
Refer to Bulletin of the Graduate Division.**

Teacher Education

In the College of Education

CENTER FOR CAREERS IN EDUCATION: Education 100

TELEPHONE: (619) 594-5964

FAX: (619) 594-1657

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, Altamura, Anderson, Baker, Becklund, Birch, Blanc, Botkin, Bradley, Briggs, Burnside, Campbell, Charles, Clark, Curry, Duckworth, Elliott, Erickson, Ford, Gast, Gates, Gega, Goodson, Gray, Groff, Hill, Huls, Inskeep, Kaatz, Kendall, Klann, LaPray, McCoy, Meek, Mehaffy, Moreno, Murphy, Nagel, T., Pehrson, Person, Platz, Prouty, Reel, Retson, Riggs, Rixman, Rodney, Ross, R., Rowland, Smith, Stautland, Steckbauer, Stough, Strand, Tossas, Wilding, Yesselman

Director: Ross, P.

Professors: Bee, Berg, Bezuk, Cornejo, Farnan, Fearn, Flood, Ingmanson, Lapp, Mason, McCormack, Mikitka, Pang, Ross, P., Shaw, Strom, Treadway

Associate Professors: Evans, Garrison, Lujan, Mathison, Neumann, Nieto, Park, Philipp, Santa Cruz, Tran

Assistant Professors: Bayles Martin, Chizhik, Clement, Fisher, Grisham, Jacobs, Mora, Pohan, Rodriguez, Ross, D.

Lecturers: Bippert, Bjornson, Moore, Nagel, A., Wood

Offered by the School

Master of Arts degree in education.

Multiple subject teaching credential.

Multiple subject cross-cultural language and academic development (CLAD) credential.

Reading/language arts specialist credential.

Single subject teaching credential.

Single subject cross-cultural language and academic development (CLAD) credential.

Certificate in children's literature.

The Credentials

The demand for elementary and secondary teachers is dramatically increasing. Current growth in student enrollment and the need to replace teachers who retire combine to forecast a significant increase in new teacher hiring during the next decade. 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, including full-time, part-time, and accelerated models are available to credential candidates. Daytime commitments are required for student teaching placements. Examinations and/or coursework prerequisite to program admission, if not completed within the undergraduate degree program, may extend the total time commitment for credential issuance.

The Single Subject Credential qualifies graduates to teach in grades K-12 in a specific subject area. Most candidates prepare to teach in grades 7-12 (usually junior or senior high school) or in a middle school setting (usually grades 6-8). Students in the program follow a sequence of courses which normally takes two semesters to complete. The first semester of the program emphasizes curriculum theory and development, educational research, and foundations of education and includes a part-time student teaching experience. The second semester focuses on a full-time student teaching experience and accompanying seminar. The program requires a daytime commitment. A part time 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 by one or more semesters.

Multiple Subject Credential (Elementary Education)

(Credential Code:

00200)

Multiple Subject–Professional Clear 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 through completion of an approved waiver program (Liberal Studies or passing scores on the PRAXIS Multiple Subject Assessment for Teachers (MSAT) (must have scores taken within five years prior to recommendation).
5. Demonstrated knowledge of the principles and provisions of the United States Constitution through successful completion of a three-unit collegiate-level course or examination. (Courses are listed in the section of this catalog on "Graduation Requirements," IV. American Institutions Requirement, B.2. United States Constitution
6. Knowledge of health education in California, including substance abuse and nutrition: Community Health Education 101 or 320, and verification of CPR competency.

7. Demonstrated knowledge of PL 94-142: Needs of, and methods of providing educational opportunities to individuals with exceptional needs (mainstreaming), TE 526.
8. Demonstrated knowledge of computer hardware, software, and applications to educational/classroom use (computer literacy): EDTEC 470.
9. Completion of a fifth year of study (30 units of upper division or graduate-level coursework completed **after** issuance of the baccalaureate degree; coursework in professional preparation, including student teaching, may apply if completed after the baccalaureate degree).

The Professional Clear Multiple Subject credential is valid for five years and requires completion of a minimum of 150 hours of approved professional growth activities and 90 days of teaching-related activities in order to be renewed.

Multiple Subject (Elementary)–Preliminary Credential

Candidates may be recommended for Preliminary Multiple Subject teaching credentials when they have satisfied requirements 1, 2, 3, 4, and 5 listed above. Applicants whose academic programs allow them to meet these requirements concurrently with their baccalaureate degrees will be eligible for preliminary certification. The Preliminary credentials have the same teaching authorizations as the Professional Clear credentials and are valid for five-year periods. Holders of the Preliminary credentials must complete items 7, 8, 9, and 10 within that five-year time period in order to be renewed as Professional Clear credentials. Five-year preliminary credentials may not be extended without completion of the additional requirements within the original five years of issuance.

NOTE: *Undergraduate students in the Multiple Subject credential program may register for concurrent postbaccalaureate 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 Multiple Subject Credential Program

Candidates for the Multiple Subject Credential Program must satisfy the standards and qualifications listed below and submit complete application packets to the Center for Careers in Education.

Completed application packets will include items verifying satisfaction of the following:

1. **CBEST Examination.** Students must pass the California Basic Educational Skills Test (CBEST) *prior to admission* to the Multiple Subject credential program. Information may be obtained from the Test Office, SS-2549. Candidates are urged to take this examination as early as possible. Candidates are required to submit a photocopy of the individual score reports.
 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 Multiple Subject Credential Program. This may be done through successful completion of the Liberal Studies major or its equivalent at another California teacher-training institution or passing scores on the PRAXIS Multiple Subject Assessment for Teachers (MSAT). Test scores submitted for verification of subject matter competency are valid for five years from the date of the examination and must be valid at the time of recommendation for the credential. Registration information and materials for the PRAXIS MSAT are available through the Center for Careers in Education, ED-100.
 3. **Prerequisite Courses.** These courses or approved equivalents must be completed with grades of “C,” “CR,” or higher no more than five years prior to admission to the Multiple Subject Credential Program. The courses may be in progress at the time of program application.
 4. **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.
 5. **Mathematics 210, “Structure and Concepts of Elementary Mathematics.”** This course covers pre-number concepts; development of whole numbers, integers, and their operations; number theory; geometric concepts of two and three-dimensional spaces; problem-solving strategies. With approval of the mathematics adviser, any of the following courses may be substituted for Mathematics 210: Mathematics 121, 150, 312.
- 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 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. Further information about GPA requirements is available in the Center for Careers in Education, ED-100. Candidates are required to submit official copies of transcripts from all colleges and universities attended and unofficial copies of transcripts for SDSU coursework for GPA calculations.
 5. **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 HMO’s, or public health agencies.
 6. **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. In lieu of the actual Certificate of Clearance or copy of a valid credential, candidates may submit their clearance application packets and fees concurrently with program applications.
 7. **Early Field Experience.** All candidates are required to participate in an early field experience in the public schools prior to admission to the program. This requirement can be satisfied through documented experience or completion of Liberal Studies 300 or Teacher Education 290 since August 1993.
 8. **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 packets.
- 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.
- 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 Center for Careers in Education, ED-100, (619) 594-5964. All candidates are urged to attend one of the regularly scheduled group advising sessions prior to making an individual appointment.*

Multiple Subject Credential Cross-Cultural Language and Academic Development (CLAD) Emphasis

(Credential code: 00200)

The program of study leading to the Multiple Subject Credential with an emphasis in Cross-Cultural, Language, and Academic Development (CLAD) prepares candidates to teach in classrooms serving the increasing number of children in our schools with limited English proficiency in situations where bilingual teachers are not available. The CLAD program provides candidates with more training than basic credential candidates in three areas: language acquisition/development, culture, and pedagogical strategies for English language development. This credential will help meet the critical shortage of bilingual teachers in California public schools by preparing entry level teachers to deliver specially-designed academic instruction in English promoting both language development and academic success in all content areas.

Candidates recommended for the Multiple Subject Teaching Credential with a Cross-Cultural, Language and Academic Development Emphasis (CLAD) must meet all the requirements for the Multiple Subject Preliminary Credential and satisfy the admission standards and qualifications for the Multiple Subject Credential program listed above. In addition, they must complete the following prerequisites:

1. **Experience Learning a Second Language**
Six semester units of college coursework in a second language or equivalent experience such as three years of high school foreign language, Peace Corps training and service or residence in a non-English speaking country.*
2. Prerequisite Course
Education 451 3 units
3. Corequisite Courses
Education 516 1 unit
Policy Studies in Language and
Cross-Cultural Education 914 3 units
OR
Linguistics 550 3 units

* Already required for Liberal Studies major and some Single Subject majors.

Single Subject Credential/CLAD Emphasis (Secondary Education) (Credential Code: 00100)

Single Subject–Professional Clear 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: Art
- Business: Accounting, Finance, Information Systems, Management, Marketing
- English: Communication, Comparative Literature, English, Journalism, Linguistics, Theatre
- Foreign Languages: Classics (Latin), French, German, Russian, Spanish
- Science: Biology, Chemistry, Geological Sciences, Physical Science
- Mathematics: Mathematics
- Music: Music

Physical Education: Kinesiology (Specialization in Physical Education)

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 and coursework in reading methods. The required courses at SDSU are Teacher Education 903, 914, 922, 933, 954, 963, 964.
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 PRAXIS/SSAT examinations. Candidates should check with the Center for Careers in Education, ED-100, to clarify the appropriate means for satisfaction of the subject matter competency requirement in their subject matter area(s). Competency must be verified and assessed by a designated departmental adviser regardless of the means of establishing knowledge proficiency.
5. Demonstrated knowledge of the principles and provisions of the United States Constitution through successful completion of a three-unit collegiate-level course or examination. (Courses are listed in the section of this catalog on "Graduation Requirements," IV. American Institutions Requirement, C.b.2.)
6. Knowledge of health education in California, including substance abuse and nutrition, Community Health Education 101 or 320 and verification of CPR competency.
7. Demonstrated knowledge of PL 94-142, needs or and methods of providing educational opportunities to individuals with exceptional needs (mainstreaming): TE 526.
8. Demonstrated knowledge of computer hardware, software, and applications to educational/classroom use (computer literacy): EDTEC 470.
9. Completion of a fifth year of study (30 units of upper division or graduate-level coursework completed *after* issuance of the baccalaureate degree; coursework in professional preparation, including student teaching, may apply if completed after the baccalaureate degree).

The Professional Clear Single Subject credential is valid for five years and requires completion of a minimum of 150 hours of approved professional growth activities and 90 days of teaching-related activities in order to be renewed.

Single Subject–Preliminary Credential

Candidates may be recommended for Preliminary Single Subject teaching credentials when they have satisfied requirements 1, 2, 3, 4, and 5 listed above. Applicants whose academic programs allow them to meet these requirements concurrently with their baccalaureate degrees will be eligible for preliminary certification. The Preliminary credentials have the same teaching authorizations as the Professional Clear credentials and are valid for five-year periods. Holders of the Preliminary credentials must complete items 6, 7, 8, and 9 within that five-year time period in order to be renewed as Professional Clear credentials. Five-year Preliminary credentials may not be extended without completion of the additional requirements within the original five years of issuance.

NOTE: Undergraduate students in the Single Subject credential program may register for concurrent postbaccalaureate 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 complete application packets to the Center for Careers in Education.

Completed application packets will include items verifying satisfaction of the following:

- 1. CBEST Examination.** Students must pass the California Basic Educational Skills Test (CBEST) prior to admission to the Single Subject Credential Program. Information may be obtained from the Test Office, SS-2549. Candidates are urged to take this examination as early as possible. Candidates are required to submit a photocopy of the individual score reports.
- 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 PRAXIS/SSAT examinations, or a combination of coursework and examination scores. 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. Students who have completed approved waiver programs at other universities must still be assessed by SDSU subject matter departments prior to admission to this university's credential program. Early submission of completed application packets is encouraged to facilitate enrollment and preference in block placement. Applicants submitting materials late in the term may be considered on a "space available basis" only. 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 the Center for Careers in Education, ED-100. Students who have completed approved waiver programs at other universities must still be assessed by SDSU subject matter departments prior to admission to this University's credential program.
- 3. Prerequisite Course.** This course or its approved equivalent must be completed with grades of "C," "CR," or higher no more than five years prior to admission to the Single Subject Credential Program. The course may be in progress at the time of program application.

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.

- 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 Center for Careers in Education, ED-100. 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. 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 HMO's, or public health agencies.

6. 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. In lieu of the actual Certificate of Clearance or copy of a valid credential, candidates may submit their clearance application packets and fees concurrently with program applications.

7. Early Field Experience. All candidates are required to participate in an early field experience in the public schools prior to admission to the program. This requirement can be satisfied through documented experience or successful completion of Teacher Education 453 since August 1992.

8. Appeals Process. Candidates who do not meet all the admission requirements may petition the Single Subject Admissions and Retention Committee for individual consideration; petition forms must be submitted concurrently with the application packets.

In addition to the minimum admissions standards identified above, the Single Subject Admissions and Retention Committee also may consider qualifications such as previous teaching experience, relevant working experience with children, and second language ability. Due to the number of applicants, application to the program does not ensure admission.

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 Center for Careers in Education, ED-100, (619) 594-5964. All candidates are urged to attend one of the regularly scheduled group advising sessions prior to making an individual appointment.*

Single Subject Cross-Cultural Language and Academic Development (CLAD) Emphasis

(Credential Code: 00100)

The program of study leading to the Single Subject with Cross-Cultural Language and Academic Development (CLAD) emphasis prepares candidates to teach in classrooms serving the increasing number of children in our schools with limited English proficiency in situations where bilingual teachers are not available. The CLAD program provides candidates with training in three areas: language acquisition/development, culture, and pedagogical strategies for English language development. This credential will help meet the critical shortage of bilingual teachers in California public schools by preparing entry level teachers to deliver specially-designed academic instruction in English promoting both language development and academic success in all content areas.

Candidates recommended for the Single Subject with Cross-Cultural Language and Academic Development (CLAD) emphasis must meet all the requirements for the Single Subject Preliminary Credential and satisfy the admission standards and qualifications for the Single Subject Credential Program. In addition, they must complete the following prerequisites:

1. Experience Learning a Second Language. Six semester units of college coursework in a second language or equivalent experience such as three years of high school foreign language, Peace Corps training and service or residence in a non-English speaking country.
2. Prerequisite Course.

Units

ED 451 Introduction to Multicultural Education..... 3

3. Single Subject CLAD Coursework.

	<i>Units</i>
ED 516 Foundations of Bilingual Education1	
PLC 914 Teaching and Learning in the Content Area: Methods in English Language Development and SDAIE 3	
TE 903 Secondary School Student Teaching Seminar Cr/NC2	
TE 914 Teaching and Learning in the Content Area: Major 3	
TE 922 Behavioral and Psychological Aspects of Teaching 3-4	
TE 933 Teaching of Reading in the Secondary School 3	
TE 954 Humanistic and Social Aspects of Teaching 3-4	
TE 963 Secondary School Student Teaching I Cr/NC/SP 3	
TE 964 Secondary School Student Teaching II Cr/NC/SP 9-12	
Total Units	30-35

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 Center for Careers in Education, ED-100.

Description of Interdepartmental Major for Elementary Teaching

**Liberal Studies Major
With the B.A. Degree in Liberal Arts and Sciences
(Premajor Code: 49012) (Major Code: 49015)**

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.

The Liberal Studies major meets all the requirements for the multiple subject/diversified major as specified for the Multiple Subject credential.

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
- Exercise and Nutritional Sciences 241A, 241B
- Mathematics 210
- Music 102

Other students who wish to take this major must consult the Dean of the Division of Undergraduate Studies to secure program approval.

General advising for the Liberal Studies major is available at the University Advising Center.

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.

New Students Who Seek to Complete a Credential

Teachers with Preliminary Multiple Subject or Single Subject credentials who are working toward Professional Clear certification may have individual programs designed to meet their needs and interest areas. Arrangements for evaluation of college credit and program design can be made through the Center for Careers in Education, ED-100, (619) 594-5964.

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.

Children's Literature Certificate

This certificate attests that the student has successfully completed 18 units (minimum GPA 3.0) of planned, advised, coherent, and articulated study in the field of literature for children. Prerequisites include admission to the University and to upper division or graduate standing. The Certificate in Children's Literature may be earned with a specialization either in Education or in English and Comparative Literature. Nine units in the certificate program may be counted toward the major in English, and six units may be counted toward the minor in English.

Specialization in Education. Nine units from courses in group A, six units from group B, and three units of an appropriate elective chosen with the approval of a faculty adviser.

Specialization in English and Comparative Literature. Nine units from courses in group B, six units from group A, and three units of an appropriate elective chosen with the approval of a faculty adviser.

Group A, Education: Educational Technology 596; Teacher Education 496*, 530.

Group B, English and Comparative Literature: Comparative Literature 561 (when offered as European Children's Literature); English 496*, 501, 526*, 527*, 528*, 549*.

* With adviser's permission when the subject is closely related to children's literature.

Courses

Note to all Multiple Subject and Single Subject credential candidates: All credential courses are listed and described in the **Graduate Bulletin** under the 900-series courses.

UPPER DIVISION COURSES (Intended for Undergraduates)

303. The Teaching Profession: First Clinical Experience (4) (Offered only at IVC)

Three lectures and three hours of laboratory.
Prerequisite: Requires clearance for all legally mandated fingerprint requirements.

Social science concepts and theories for the teaching profession; guided student observation and participation in public school classrooms.

362. Fieldwork in Community Settings (1-4)

One lecture and two 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.

397. Problems in Education (Credit to be arranged) I, II (Offered only in Extension)

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.

402. Foundations of Education (3) I, II (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.

415. Methods and Materials of Instruction (3) I, II (Offered only at IVC)

Prerequisites: 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.

434. Teaching of Reading (3) I, II (Offered only at IVC)

Two lectures and two hours of laboratory.
Nature of reading as a human behavior; various approaches and materials used to facilitate student growth in learning to read.

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.

499. Special Study (1-3) I, II

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)

511. Diagnosis and Remediation of Difficulties in Mathematics (3)

The assessment and remediation of underachievers in mathematics. Techniques in determining difficulties in mathematics and prescribing remedial work; for use by elementary and secondary classroom teachers and mathematics education specialists.

525. Discipline and Classroom Management (3) I, II

Prerequisite: Six upper division units in education, psychology or sociology.

Analysis of research and theories of classroom discipline, management, and teaching effectiveness, with practical application to the elementary and secondary classroom setting.

526. Teaching the Special Child in the Regular Classroom (2)

Prerequisite: Teaching credential or admission to multiple or single subject credential programs.

Knowledge, skills, and instructional programs for teaching handicapped students in the regular classroom. Meets the mainstreaming requirements for the California Multiple Subject credential (clear). Not open to students with credit in Special Education 550, Teaching the Special Child in the Regular Classroom.

530. Children's/Adolescents' Literature (3) I, II

Survey of children's/adolescents' literature and its incorporation into the classroom curriculum.

596. Topics in Teacher Education (1-3 or 6) SP* I, II

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. Maximum six units of 596 and 696 applicable to a 30-unit master's degree.

* Specified sections.

GRADUATE COURSES Refer to Bulletin of the Graduate Division.

Telecommunications and Film

Refer to "Communication" in this section of the catalog.

Theatre

In the College of Professional Studies and Fine Arts

OFFICE: Dramatic Arts 204
TELEPHONE: (619) 594-6363
FAX: (619) 594-7431
WWW: <http://theatre.sdsu.edu>

Accredited by the National Association of Schools of Theatre.

Faculty

Emeritus: Howard, Stephenson
Chair: Annas
The Don W. Powell Chair in Scene Design: Funicello
Professors: Annas, Harvey, A.C., Harvey, M., Larlham, P.,
McKerrow, O'Donnell, Salzer, Wolf
Associate Professors: Kalustian, Reid, Schreiber
Assistant Professors: Reinholz, Simas
Lecturers: Hargrove, Larlham, M., Pierson

Offered by the Department

Master of Arts degree in theatre arts.
Master of Fine Arts degree in theatre arts.
Major in theatre arts with the B.A. degree in applied arts and sciences.
 Emphasis in children's drama.
 Emphasis in design and technology for the theatre.
 Emphasis in design for television and film.
 Emphasis in performance.
Teaching major in theatre arts for the single subject teaching credential in English.
Minor in theatre arts.

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. Always concerned about students, Powell, who retired after 30 years with the theatre department, created the trust in order to enhance theatre education at SDSU. The first holder of The Don W. Powell Scene Design Chair is the nationally acclaimed designer Ralph Funicello.

The Major

The bachelor's degree in theatre arts prepares students for excellence in performance and design. To achieve that goal, the department offers a rich diversity of courses and a six-play production season open to the San Diego public with many creative design and performance opportunities for the student. In addition, professional growth opportunities are provided through association with a number of regional professional theatre companies as well as campus visits by professional theatre managers, directors, stage managers, designers, playwrights, and actors. The program is structured in a manner which involves students in all aspects of theatre. Students have the option of pursuing either a general emphasis in theatre arts or specializing in a single emphasis area.

The Department of Theatre offers students a wide variety of courses taught by a highly qualified faculty. The mission of the department is twofold. First of all, we wish to provide quality education on the undergraduate and graduate levels for students who desire to pursue a career in theatre, whether that career be in acting, directing, design, technical theatre, or teaching. Our second, and equally important mission, is a strong commitment to the philosophy of the University as a liberal arts institution. We provide undergraduate students an opportunity to enrich their present and future lives by learning to understand and enjoy the art of theatre.

The faculty of the Department of Theatre believes that theatre is a rewarding undergraduate major, even for those who do not plan a career in the field. The study of theatre enriches the lives of men and women because it helps them to know themselves and to interact

effectively with one another. Theatre is the fine art which is often considered to be a combination of all the arts. Through it, we experience the work of some of the greatest writers and thinkers and artists our civilization has ever known. As we learn about theatre, we understand more about ourselves and develop a remarkable respect for the human spirit.

The Department of Theatre's training is specifically geared toward assisting students in their efforts to seek professional work in various fields of theatre arts, to seek teaching positions in various levels of educational theatre, to contribute to the cultural life of the community by participating in civic and community theatre work, and to further their awareness of drama as a significant art form in order to become informed and discriminating members of the theatre public.

In addition, the Department of Theatre offers a wide variety of courses which provide excellent enrichment opportunities for the non-theatre major. Students pursuing study in "people/service related" disciplines such as education, business administration, telecommunications and film, counseling, advertising, journalism, and prelaw are encouraged to explore the many courses available in the department's curriculum which will prove rewarding and beneficial to their career objectives.

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.

General Theatre Arts Program

Preparation for the Major. Theatre 100, 107, 110, 120, 130, 231, 240A, 240B, 240C. (27 units)

Upper Division Writing Requirement. Passing the University Writing Examination or Rhetoric and Writing Studies 305W or 500W with a grade of C (2.0) or better.

Major. A minimum of 36 upper division units in theatre to include Theatre 325, 359, 425, 442A, 442B, 446A (one unit), 446B (one unit), 460A, 460B; and six units selected from Theatre 440, 447, 448, 452, 548; three units selected from Theatre 350, 351, 355, 532, 551, 555; and six units selected from Theatre 310, 315, 345, 459, 475A, 475B.

Emphasis in Children's Drama

Preparation for the Major. Theatre 100, 107, 110, 120, 130, 240A, 240B, 240C. (24 units)

Upper Division Writing Requirement. Passing the University Writing Examination or Rhetoric and Writing Studies 305W or 500W with a grade of C (2.0) or better.

Major. A minimum of 39 upper division units in theatre to include Theatre 310, 315, 325, 359, 425, 442A, 442B, 446A (one unit), 446B (one unit), 460A, 460B, 480, 510; Teacher Education 530; and three units selected from Theatre 329A, 329B, 440, 447, 452, 459, 475A, 475B.

Emphasis in Design and Technology for the Theatre

Preparation for the Major. Theatre 100, 107, 110, 120, 130, 240A, 240B, 240C. (24 units)

Upper Division Writing Requirement. Passing the University Writing Examination or Rhetoric and Writing Studies 503W with a grade of C (2.0) or better.

Major. A minimum of 42 upper division units in theatre to include Theatre 325, 359, 425, 440, 442A, 442B, 446A (one unit), 446B (one unit), 447, 452, 460A, 460B, 530; and three units selected from Theatre 448, 540, 547, 548, or 552; and six units selected from Theatre 349, 539, 541, 543, 545, 546, 549, 554A, or 554B. Recommended electives: Theatre 345, 475A, 551, 570A, 570B.

Emphasis in Design for Television and Film

Preparation for the Major. Theatre 100, 107, 130, 240A, 240B, 240C; Television, Film, and New Media 250. (21 units)

Upper Division Writing Requirement. Passing the University Writing Examination or Rhetoric and Writing Studies 503W with a grade of C (2.0) or better.

Major. A minimum of 52 upper division units in theatre to include Theatre 325, 359, 425, 440, 442A, 442B, 446A (one unit), 446B (one unit), 447, 452, 460A, 460B, 530; Television, Film, and New Media 320, 325, 550; and six units selected from Theatre 448, 540, 547, 548, 552, Television, Film, and New Media 401 or Television, Film, and New Media 551; and four units selected from Theatre 539, 541, 543, 545, 546, 549, 554A, or 554B.

Emphasis in Performance

Preparation for the Major. Theatre 100, 107, 110, 120, 130, 231, 240A, 240B, 240C. (27 units)

Upper Division Writing Requirement. Passing the University Writing Examination or Rhetoric and Writing Studies 305W or 500W with a grade of C (2.0) or better.

Major. A minimum of 42 upper division units in theatre to include Theatre 320, 325, 355, 359, 425, 442A, 442B, 446A (one unit), 446B (one unit), 446C (two units), 460A, 460B, 551, 555; and nine units selected from Theatre 350, 351, 431, 434, 532, 533A, or 533B. Recommended electives: Theatre 345, 349, 459, 475A, 475B, Television, Film, and New Media 390.

Theatre Arts Major

In preparation for the Single Subject Teaching Credential in English With the B.A. Degree in Applied Arts and Sciences (Major Code: 10071)

All candidates for a teaching credential must complete all requirements as outlined in this section of the catalog under Policy Studies or Teacher Education.

This major may be used by students in policy studies or teacher education as an undergraduate major for the B.A. degree in applied arts and sciences.

Preparation for the Major. Theatre 100 or 120, 107, 240A, 240B; Linguistics 101; Comparative Literature 270A or 270B or English 220; Humanities 140; Rhetoric and Writing Studies 100 and 200; Communication 200; and three units selected from Theatre 130, English 280, 281, or Journalism 220; and six units from one of the following sequences: English 250A and 250B or English 260A and 260B. Theatre 100 or 120 and 107 must be taken early in the student's program in order to satisfy prerequisites. (39 units)

Upper Division Writing Requirement. Passing the University Writing Examination or Rhetoric and Writing Studies 500W with a grade of C (2.0) or better.

Major. A minimum of 39 upper division units to include Theatre 325, 359, 425, 460A, 460B, 480, and Theatre 310 or Comparative Literature 562; English 533 and Rhetoric and Writing Studies 509; three units selected from English 522, 523, 524, or 525 (for those students who previously selected English 260A and 260B), or three units selected from English 560A or 560B (for those students who previously selected English 250A and 250B); and nine units selected from one of the following sequences:

Children's Drama: Theatre 315, 459, 510.

Design for Theatre: Theatre 440, 447, 452, 546, 548.

Musical Theatre: Theatre 350, 351, 355, 555.

Performance/Stage Management: Theatre 110, 231, 355 or 555, 459, 475A.

An additional six units selected from the following: Africana Studies 460, 461, 462, 463, 464; American Indian Studies 430; Chicana and Chicano Studies 335, 464; Communication 360, 371, 391, 407, 408, 491; English 519 or 520 and 541A or 541B; Linguistics 420, 530, 550.

Theatre Arts Minor

Theatre 100 is prerequisite to the theatre arts minor and does not count towards the units required for the minor.

The minor in theatre arts consists of 24 units in theatre to include Theatre 107, 120; 115 or 345; 460A or 460B; and three units selected from Theatre 240A, 240B, or 240C; three units selected from Theatre 310, 315, or 325; and six units selected from Theatre 355, 442A, 442B, 475A, or 555.

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

LOWER DIVISION COURSES

(Unless otherwise noted, all Drama courses are now listed as Theatre courses.)

100. Theatre and Civilization (3) I, II

Introduction to theatre as a reflection of society and a contributor to development of civilization. Emphasis on theatre's continuing relevance to contemporary world. Attendance at selected theatre events required.

107. Design Communication and the Audience Response (3) I, II

Use of visual and aural design components by the actor, director, and designer in relation to audience response. Preparatory to theatre arts major sequence.

110. Voice and Speech I (3) I, II (CAN DRAM 6)

Exercises and drills to improve the quality, flexibility and effectiveness of the speaking voice leading to good usage in standard American speech.

115. Acting for Nonmajors (3) I, II

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. Not open to theatre arts majors.

120. Heritage of Dramatic Literature (3) I, II

Three lectures and attendance at selected performances.

Survey of dramatic literature from classical to the modern period, including classical, medieval, Renaissance, Restoration, neoclassical, romantic, realistic and modern plays.

130. Acting I (3) I, II (CAN DRAM 8)

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.

231. Acting II (3) I

Prerequisite: Theatre 130.

Continuation of Theatre 130, emphasizing application of fundamental skills to problems of emotion, timing, characterization, and ensemble acting.

240A. Theatre Design and Technology I (3) I, II

Two lectures and three hours of laboratory.

Prerequisites: Theatre 100 and 107. **Proof of completion of prerequisites required:** Copy of transcript.

Design, technical practices, and production organization for the theatre; scenery and stagecraft. Practical experience in university sponsored productions.

240B. Theatre Design and Technology II (3) I, II

Two lectures and three hours of laboratory.

Prerequisites: Theatre 100 and 107. **Proof of completion of prerequisite required:** Copy of transcript.

Design, technical practices, and production organization for the theatre: costume and makeup. Practical experience in university sponsored productions.

240C. Theatre Design and Technology III (3)

Two lectures and three hours of laboratory.

Prerequisite: Theatre 240A. **Proof of completion of prerequisite required:** Copy of transcript.

Design, technical practices, and production organization for the theatre: lighting and sound. Practical experience in university sponsored productions.

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)

310. Creative Drama I (3) I, II, S

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.

315. Theatre for Young Audiences (3) I, II

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.

320. Voice and Speech II (3) II

Prerequisite: Theatre 110.

Techniques of vocal expression in the theatre, primarily in plays of Shakespeare and classical Greek drama. Emphasis on individualized instruction and vocal problem solving.

325. Play Analysis (3) I, II

Prerequisites: Theatre 100 and completion of lower division writing competency requirement. **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.

329A-329B. Practicum in Theatre for Young Audiences Cr/NC (329A: 2 units) (329B: 1unit)

Two hours of activity per unit.

Prerequisite: Theatre 315.

Practical experience in department public performances of plays for young audiences.

A. Rehearsal

B. Performance

345. Theatre Marketing and Publicity (3)

One lecture and four hours of activity.

Prerequisite: Theatre 100 or 107.

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. (Formerly numbered Drama 245.)

349. Theatrical Makeup (2) I

Two hours per unit.

Prerequisite: Theatre 240B.

Planning and application of makeup for stage, film, and television. Classroom exercises and production-related activities.

350. Musical Theatre Performance I (3) I

Two lectures and two hours of activity.

Prerequisite: Admission by consent of instructor.

Basic performance techniques in musical theatre. Emphasis on application of acting theory to musical theatre literature. Maximum credit six units.

351. Musical Theatre Performance II (3) II

Two lectures and two hours of activity.

Prerequisite: Consent of instructor.

Vocal selections and scenes in musical theatre. Emphasis on characteristics and performance styles. Maximum credit six units.

355. Movement for the Theatre I (2) II

Two hours of activity per unit.

Prerequisite: Theatre 100.

Locomotor and axial body movement for the stage director and actor; introduction to mime. Relationship between body expression and character portrayal.

359. Directing I (3) I, II

Prerequisites: Theatre 115 (for minors) or 130 (for majors), and 325. **Proof of completion of prerequisite 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.

397. Shakespeare at the Globe: Onstage and Backstage (1-3) S (Offered only in Extension)

Study of Old Globe Theatre's annual summer Shakespeare Festival. Does not apply to undergraduate degrees or credentials.

425. Production Synthesis (3)

Prerequisites: Theatre 240B, 240C, and 359. **Proof of completion of prerequisites required:** Copy of transcript.

Capstone course integrating artistic vision and production considerations through synthesis of text analysis, performance, and design in collaborative process unique to the theatre.

431. Workshop in Improvisational Acting (3) I

Prerequisite: Theatre 231.

Theories and principles of improvisational acting.

434. Audition Techniques for the Actor (3) II

Two lectures and two hours of activity.

Prerequisite: Theatre 231.

Techniques of auditioning and interviewing in the theatre, film, and television; selecting audition pieces, rehearsing, and performing auditions.

440. Scene Design I (3) I

Two lectures and three hours of laboratory.

Prerequisites: Theatre 240A and 325.

Techniques and procedures in application of design, color, and perspective in designing scenery.

442A-442B. Practicum in Theatrical Production (2-2) I, II

Two hours of activity per unit.

Prerequisite for 442A: Theatre 240A. Prerequisite for 442B: Theatre 240B.

Technical theatre production experience for departmental public performances.

- A. Scenery Construction
- B. Costume Construction

446A-446B. Practicum in Performance (1-1) Cr/NC I, II

446C. Practicum in Performance (1-3) Cr/NC I, II

Two hours per unit.

Prerequisite for 446A: Theatre 240A. Prerequisite for 446B: Theatre 240B. Prerequisite for 446C: Theatre 100.

Practical experience in departmental public performances. Maximum credit three units for Theatre 446A. Maximum credit three units for Theatre 446B. Maximum credit six units for Theatre 446C. (Theatre 446C formerly numbered Theatre 445A; Theatre 446A and 446B formerly numbered Theatre 445B.)

- A. Stage Crew
- B. Costume Crew
- C. Cast Member

447. Lighting Design I (3) II

Two lectures and three hours of laboratory.

Prerequisites: Theatre 240C and 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.

448. Scene Design Technology (3) I

Two lectures and three hours of laboratory.

Prerequisite: Theatre 240A.

Current materials and practices of scenery technology. Advanced construction techniques, research, budget and management procedures. (Formerly numbered Drama 448B.)

452. Costume Design I (3) I

Two lectures and three hours of laboratory.

Prerequisites: Theatre 240B and 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.

459. Directing II (3) II

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.

460A-460B. History of the Theatre (3-3) I, II

Prerequisite: Completion of the General Education requirement in Foundations II.C., Humanities. Prerequisite not required for theatre arts majors.

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 460B.

475A. Stage Management—Theory (2) I

Prerequisites: Theatre 240B and 240C.

Development of the prompt script, organizational methods, and collaborative personnel interaction.

475B. Stage Management—Practicum (2) I, II

Hours vary.

Prerequisite: Theatre 475A.

Practical experience in stage managing department productions. Maximum credit four units.

480. Drama in the Classroom: K-12 (3) II

Prerequisites: Theatre 310 and 315.

Methods of teaching drama in elementary, middle, and secondary schools. Emphasis on organization of curriculum, play selection, and principles of producing plays in the classroom.

496. Experimental Topics (1-4) I, II

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.

499. Special Study (1-3) I, II

Prerequisite: Consent of instructor.

Individual study. Maximum credit six units.

**UPPER DIVISION COURSES
(Also Acceptable for Advanced Degrees)**

510. Creative Drama II (3) I

Prerequisite: Theatre 310.

Advanced techniques and procedures in teaching creative drama. Emphasis on a multicultural approach. Practical experience through fieldwork in elementary or middle school classrooms.

520. History of Musical Theatre (3) I

Prerequisite: Upper division standing.

Musical theatre from early Viennese operettas to musicals of modern times; representative works.

523. Stage Combat (2) II

Four hours of activity.

Prerequisite: Theatre 355 for undergraduates. Graduate standing for postbaccalaureate students.

Skills and choreography of armed and unarmed stage combat. Performance application to selected scenes from world drama.

530. Period Dress and Decor (3) I

Prerequisite: Theatre 240B 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.

532. Advanced Acting and Directing (3) I

Prerequisite: Theatre 231. Acting students admitted by audition only; directing students by interview.

Problems in characterization in contemporary drama, and in plays of Ibsen, Strindberg, Chekhov, and Shaw.

533A-533B. Theory and Styles in Acting and Directing I and II (3-3)

Prerequisite: Theatre 231. Acting students admitted by audition only; directing students by interview.

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.

539. Theatre Rendering (2) I

Four hours of activity.

Prerequisite: Theatre 240B.

Rendering for scenic, costume, and lighting designer. Techniques, media, and portfolio preparation. Maximum credit four units.

540. Scene Design II (3) II

Prerequisites: Theatre 440 and 530.

History of scene design and application of contemporary styles to various types of dramatic production.

541. Scene Painting (2) II

Four hours of activity.

Prerequisite: Theatre 530.

Theories and techniques of scene painting, including both historical backgrounds and modern procedures. Full-scale projects executed in scenery studio.

543. Stage Property Design (2) II

One lecture and two hours of activity.

Prerequisite: Theatre 530.

Theories and techniques of property design for the theatre: script analysis, research methods, planning and budgeting procedures, construction techniques and materials. Projects in property design for selected scripts.

545. Mechanical Drawing for the Theatre (2)

Two hours of activity per unit.

Prerequisite: Theatre 240A or admission to MFA in Design.

Theatre drafting standards and techniques. Floor plans, sections, elevations, perspective drawings, and light plots. (Formerly numbered Drama 448A.)

546. Computer Systems for the Theatre (2) II

One hour of discussion and three hours of activity.

Prerequisite: Theatre 545.

Functional study of computer systems and their application to the theatre. CADD, lighting and sound control, and production management.

547. Lighting Design II (3) I

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.

548. Sound Design for the Theatre (3) I

Two lectures and two hours of activity.

Prerequisites: Theatre 240C and 325.

Theories and techniques of sound design and reinforcement for theatrical performance. Laboratory experience in sound production.

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.

551. Costume, Movement, and Manners (3) I

Prerequisite: Upper division standing or admission to the graduate program.

Interrelationship of period costumes and the movement and manners of selected historical periods; application to staging of plays from pre-modern theatre.

552. Costume Design II (3) II

Prerequisites: Theatre 452 and 530.

Advanced studies in costume design. Emphasis on theatrical style, rendering layout, design problems, materials, and budget.

554A. Costume Design Technology I (2) II

Four hours of activity.

Prerequisite: Theatre 240B.

Current materials and practices of costume technology: advanced construction techniques, fabric selection and use, period pattern drafting, draping and cutting.

554B. Costume Design Technology II (2) II

Four hours of activity.

Prerequisite: Theatre 240B.

Advanced costume craft construction techniques and management procedures for costume production: millinery, fabric dyeing and painting, jewelry, and related crafts.

555. Movement for the Theatre II (2) I

Four hours of activity.

Prerequisite: Theatre 130 or admission to the M.F.A. program.

Movement techniques for theatre. Movement patterns, phrase development, and musical theatre movement styles. Maximum credit four units applicable to a bachelor's degree; maximum credit eight units applicable to the M.F.A. degree in theatre arts.

570A-570B. Practicum in Theatrical Production (1-3) (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. (Formerly numbered Drama 470A-470B.)

A. Independent Study with Don W. Powell Chair in Scene Design

B. Design for Department Public Performances

596. Selected Topics in Theatre (1-3) I, II

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. Maximum credit of six units of 596 applicable to a 30-unit master's degree.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

Urban Studies

Refer to "Interdisciplinary Programs" in this section of the catalog.

Women's Studies

In the College of Arts and Letters

OFFICE: Adams Humanities 3138
TELEPHONE: (619) 594-6524

Faculty

Chair: Cayleff

Professors: Cayleff, Espín, Huckle, Jones, Watson, Zimmerman

Associate Professor: Kohen

Assistant Professors: Mattingly, Washington

Offered by Women's Studies

Master of Arts degree in women's studies.

Major in women's studies.

Minor in women's studies.

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.

Women's Studies Major

**With the B.A. Degree in Liberal Arts and Sciences
(Major Code: 49991)**

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)

Foreign Language Requirement. Competency (equivalent to that which is normally attained through three consecutive semesters of college study) is required in one foreign language as part of the preparation for the major. Refer to section of catalog on "Graduation Requirements."

Upper Division Writing Requirement. Passing the University Examination or completing one of the approved writing courses with a grade of C (2.0) or better.

Major. A minimum of 27 upper division units to include twelve units from Group I; nine units from Group II; and Women's Studies 536 and 590.

Group I: Women's Studies 310, 320, 325, 340, 341A-341B, 351, 352, 360, 370, 375, 385; Africana Studies 332*, American Indian Studies 303*, Chicana and Chicano Studies 340*, Religious Studies 370*.

Group II: (Prerequisite: Three upper division units in women's studies.) Women's Studies 498, 512, 515, 521, 522, 530, 535, 553, 565, 572, 580, 582, 595, 596.

*No more than three units may be applied to the major in women's studies.

Women's Studies Minor

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 to nine units selected from Women's Studies 310, 320, 325, 340, 341A-341B, 351, 352, 360, 370, 375, 385. Africana Studies 332*, American Indian Studies 303*, Chicana and Chicano Studies 340*, Religious Studies 370*.

Three to six units selected from Women's Studies 498, 512, 515, 521, 522, 530, 535, 536, 553, 565, 572, 580, 582, 590, 595, 596.

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.

*No more than three units may be applied to the minor in women's studies.

Women's Studies Dual Degree

The MEXUS/Women's Studies program is a partnership between San Diego State University (SDSU) and the Universidad Autonoma de Baja California (UABC) located at Tijuana, Baja California, Mexico. Students may enter the program at either of the two universities, and must spend a minimum of two years in both the United States and Mexico.

Participants in the MEXUS/Women's Studies program are enrolled in the Women's Studies major at San Diego State University.

In addition to completing 49 units of General Education requirements at SDSU, students in the MEXUS/Women's Studies program must complete 33 units of women's studies courses, and either 68 units of economics, or 60 units of psychology, or 68 units of sociology. Approximately one-half of all of these requirements are completed in Spanish while attending school in Mexico. Students are also required to participate in an internship program, which provides MEXUS/Women's Studies students with the opportunity to work for an international institution and to develop a network of contacts in the private or public community, a vital step towards employment after graduation.

Successful participants in the MEXUS/Women's Studies program will earn both the Bachelor of Arts degree in women's studies from San Diego State University and either the Licenciatura in sociología or economía from UABC.

Courses

LOWER DIVISION COURSES

101. Women and the Social Sciences (3) I, II

Interdisciplinary introduction to women's studies thought and scholarship in the social sciences, to include such areas as gender-based language, personality development and self-concept, social evolution, family structures, and economic life. (Formerly numbered Women's Studies 201.)

102. Women in the Humanities (3) I, II

Major cultural representations of women in ancient through contemporary societies from perspectives in the humanities, including philosophy, religion, art, literature, and history. (Formerly numbered Women's Studies 205.)

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)**

310. Women in Cross-Cultural Perspective (3) I, II

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

Women from an anthropological perspective; social, economic, legal and ideological aspects of women's position in selected preindustrial or transitional (compared with industrial) societies.

320. Socialization of Women (3) I, II

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

Theories of socialization; summary of studies on the impact of formal and informal social institutions on female development.

325. Psychology of Women (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations 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.

340. Women in Modern European History (3) I, II

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

Social, cultural, economic, political and ideological aspects of women's history in the modern period. Impact of modernization on roles of women in family and society from the eighteenth to the mid-twentieth centuries in Europe.

341A-341B. Women in American History (3-3) I, II

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.

351. Women in the Arts (3)

Images of women in society as reflected in the plastic, graphic and performing arts; artistic contribution of women. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units.

352. Women in Literature (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations 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.

360. Women's Sexuality (3)

Historical changes in women's perceived sexual natures; role of medical and scientific expertise; research and theory on psychological, social, and cultural aspects of women's sexuality; relationships among social beliefs, expectations, customs and traditions, and among sexual behavior responses and identity.

370. Women and the Law (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations 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.

375. Sex, Power, and Politics (3) I, II

Prerequisite: Completion of the General Education requirement in Foundations 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.

385. Women's Work (3)

Prerequisite: Completion of the General Education requirement in Foundations 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. (Formerly numbered Women's Studies 485.)

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.

498. Field Internship (3) I, II Cr/NC

Prerequisites: Three upper division units in women's studies and consent of instructor.

Observation and analysis of public and private agencies which deal primarily with women in the San Diego area. Maximum credit six units.

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)**

512. Women of Latin America (3)

Prerequisite: Three upper division units in women's studies.

Social and other factors have impact on lives of Latin American women. Theoretical frameworks developed to understand their situation. Sociocultural perspectives on Latin American women's life narratives.

515. Women: Mythology and Ritual (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.

521. Life Cycles of Women (3)

Prerequisite: Three upper division units in women's studies.

Women's developmental processes across the life cycle; their impact on women, men, and the family, including life passages related to adolescence, marriage, motherhood, divorce, widowhood, "second careers," and aging in varying socioeconomic and cultural contexts.

522. Women: Madness and Sanity (3)

Prerequisite: Three upper division units in women's studies.

Concepts of mental health and mental illness as applied to women. Theory of psychotherapy, both traditional and feminist. Alternative approaches to mental health.

530. International Women's Movements (3)

Prerequisite: Three upper division units in women's studies.

Comparative study of women's movements worldwide in past and present, to include discussion of issues such as female bonding, leadership, and women's goals and strategies to achieve them within local, national, and global contexts.

535. Lesbian Lives and Cultures (3)

Prerequisite: Consent of instructor.

Historical, cultural, and social exploration of lesbianism. Topics include myths and stereotypes, history and literature, social and political movements, theoretical explanations, and current conditions.

536. Women, Race, and Class (3)

Prerequisite: Three upper division units in women's studies.

Major issues and themes in the history, culture, and contemporary lives of women of color in the U.S. Analysis of theories explaining similarities and differences in opportunities and life choices. Roles within social and political movements.

533. Women Writers (3)

Prerequisite: Three upper division units in women's studies.

Literary, historical, and social consideration of women writers; may focus on one author, era, or theme. May be repeated with new content. See Class Schedule for specific content. Maximum credit six units. Limit of three units applicable to the major in women's studies.

565. Women, Health, and Medicine (3)

Prerequisite: Three upper division units in women's studies.

Historical and contemporary relationship of women to alternative and traditional healing systems. Illness labeling, folk-healing beliefs, sectarian medicine, reproduction, birth control, life-cycle events, roles as practitioners and patients, ethical controversies, and aging.

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.

580. Women and International Development (3)

Prerequisite: Three upper division units in women's studies.

Women's roles as agents and recipients of change worldwide, focusing on such issues as self-determination, education, family and work, food and hunger, and reproduction.

582. Science and Technology in Women's Lives (3)

Prerequisite: Three upper division units in women's studies.

Role of science and technology in women's lives to include historical participation, contemporary opportunities and barriers; public policies; feminist critiques and alternative strategies for thinking about and doing science.

590. Feminist Thought (3) I

Prerequisite: Six upper division units in women's studies.

Readings in feminist theory and contemporary theoretical perspectives on core concepts and issues in feminist scholarship. Focus on understanding from a feminist perspective and on the significance of analyzing female experiences.

595. Seminar in Women's Studies (3) II

Prerequisites: Six upper division units in women's studies and consent of instructor.

Directed research in women's studies. Field of investigation will vary with instructor. Methods of investigation, development of bibliography, presentation of paper based on original research. See Class Schedule for specific content.

596. Topics in Women's Studies (3)

Prerequisite: Consent of instructor.

Advanced topics in women's studies. See Class Schedule for specific content. May be repeated with new content. Limit of nine units of any combination of 296, 496, 596 courses applicable to a bachelor's degree.

597. Research Project (3) I, II

Prerequisites: Six upper division units in women's studies and consent of adviser.

Individual research project. May be taken in place of Women's Studies 595, Seminar in Women's Studies.

GRADUATE COURSES

Refer to Bulletin of the Graduate Division.

Addenda

Faculty and Administration
Index
SDSU Campus Map

Faculty and Administration 1998–1999

- Weber, Stephen L. (1996)** *President, Professor of Philosophy*
B.A., Bowling Green State University; Ph.D., University of Notre Dame.
- Abbott, Patrick L. (1971)** *Professor of Geological Sciences*
B.S., San Diego State University; M.A., Ph.D., University of Texas at Austin.
- Abut, Hüseyin (1981)** *Professor of Electrical and Computer Engineering*
B.S.E.E., Robert College; M.S.E.E., Ph.D., North Carolina State University.
- Adams, Joseph A. (1994)** *Assistant Professor of Chemistry*
B.S., Rutgers University; Ph.D., Pennsylvania State University.
- Addo, Theophilus (1987)** *Associate Professor of Information and Decision Systems*
B.Sc., University of Ghana; M.S.T.M., American University, Washington, D.C.; M.B.A., Ph.D., Indiana University, Bloomington.
- Adler, Renatte K. (1982)** *Professor of Economics*
B.A., Ph.D., University of New Mexico.
- Aguado, Edward (1982)** *Professor of Geography*
B.A., M.A., University of California, Los Angeles; Ph.D., University of Wisconsin.
- Aguilar, Isabel (1972)** *Director, Outreach and Career Counseling, Imperial Valley Campus*
A.B., M.S., San Diego State University.
- Aitken, Stuart C. (1986)** *Professor of Geography*
B.Sc., Glasgow University; M.A., Miami University; Ph.D., University of Western Ontario.
- Alcaraz, John E. (1993)** *Assistant Professor of Public Health*
B.A., M.A., Ph.D., University of California, San Diego.
- Alcossar, Sandra B. (1986)** *Professor of English*
B.A., Purdue University; M.F.A., University of Montana.
- Alfred, Lawrence J. (1994)** *Assistant Dean for Underrepresented Student Programs, College of Sciences; Professor of Biology*
B.S., Xavier University; M.S., Ph.D., University of Illinois.
- Allen, Barbara E. (1969, except S'70)** *Assistant Dean for Student Affairs, College of Education*
A.B., M.A., San Diego State University.
- Allen, Brockenbrough S. (1982)** *Professor of Educational Technology*
A.B., M.A., University of California, Berkeley; Ph.D., University of Southern California.
- Allen, Elizabeth J. (1971)** *Professor of Communicative Disorders*
A.B., Seattle Pacific College; M.A., Ph.D., Louisiana State University.
- Allison, Alida L. (1990)** *Associate Professor of English and Comparative Literature*
B.A., M.A., San Diego State University; Ph.D., University of California, Riverside.
- Almond, Frank W. (1968)** *Professor of Music*
A.B., M.A., San Diego State University; Ph.D., Florida State University.
- Alvarado, Elizabeth R. (1974)** *Counselor, Educational Opportunity and Ethnic Affairs*
A.B., California State University, Northridge; M.S., San Diego State University.
- Amaral, Olga M. (1996)** *Assistant Professor of Teacher Education, Imperial Valley Campus*
B.A., Westfield State College; M.A., Ed.D., University of Massachusetts at Amherst.
- Amtower, Laurel (1997)** *Assistant Professor of English*
B.A., University of California, Irvine; M.A., Ph.D., University of Washington.
- Anantha, Kasi (1981)** *Professor of Mathematical and Computer Sciences*
B.A., M.Sc., Ph.D., Madras University.
- Andersen, Janis F. (1981)** *Associate Vice President for Community Services, Graduate and Research Affairs; Associate Dean for Policy and Curriculum, Graduate Division; Professor of Communication*
B.A., M.A., Bradley University; Ed.D., West Virginia University.
- Andersen, Peter A. (1981, except 1983-85)** *Professor of Communication*
B.A., University of Illinois; M.S., Illinois State University; Ph.D., Florida State University.
- Anderson, Bonnie M. (1988)** *Assistant Dean, Undergraduate Studies; Lecturer in Theatre*
B.A., Mills College; M.A., California State University, Fullerton; Ph.D., University of California, Santa Barbara.
- Anderson, Hayes L. (1966)** *Associate Dean, College of Professional Studies and Fine Arts; Professor of Communication*
A.B., Oregon State University; M.A., Ph.D., Michigan State University.
- Angione, Ronald J. (1969)** *Professor of Astronomy*
A.B., M.S., San Diego State University; Ph.D., University of Texas.
- Annas, Alicia M. (1970)** *Professor of Theatre*
A.B., University of Detroit; M.F.A., University of Texas.
- Archibald, J. David (1983)** *Professor of Biology*
B.S., Kent State University; Ph.D., University of California, Berkeley.
- Atkins, Bobbie J. (1989)** *Professor of Administration, Rehabilitation and Postsecondary Education*
B.A., Southern University in Baton Rouge; M.S., Ph.D., University of Wisconsin, Madison.
- Atkins-Kaplan, Catherine J. (1988)** *Assistant Dean for Student Affairs, College of Sciences; Professor of Psychology*
A.B., M.S., San Diego State University; Ph.D., University of California, Riverside.
- Aufmesser, Peter M. (1975)** *Professor of Exercise and Nutritional Sciences*
B.S., Springfield College; Ed.M., State University of New York, Buffalo; Ph.D., University of Maryland.
- Austin, Joan F. (1970)** *Professor of Art*
A.B., California State University, Long Beach; M.F.A., Cranbrook Academy of Art.
- Avila, Vernon L. (1973)** *Associate Professor of Biology*
B.S., University of New Mexico; M.A., Northern Arizona University; Ph.D., University of Colorado.
- Baase-Mayers, Sara (1972)** *Professor of Mathematical and Computer Sciences*
A.B., New York University; M.A., Ph.D., University of California, Berkeley.
- Baber, Carolyn D. (1987)** *Associate Librarian*
B.S., Illinois State University; M.S., University of Illinois at Urbana-Champaign.
- Bacon, Elizabeth A. (1975)** *Director, Disabled Student Services*
A.B., M.S., San Jose State University.
- Bailey, Allan R. (1968)** *Professor of Accountancy*
B.S., San Diego State University; M.B.A., Ph.D., University of California, Los Angeles.
- Bailey, Greg W. (1982)** *Associate Professor of Electrical and Computer Engineering and Mechanical Engineering*
B.A., M.A., San Diego State University; Ed.D., Arizona State University.
- Baker, Richard J. (1978)** *Professor of Art*
B.F.A., Kansas City Art Institute; M.F.A., University of Cincinnati.
- Balkwell, Carolyn K. (1981)** *Professor of Child and Family Development*
B.S., Michigan State University; M.S., Kansas State University; Ph.D., University of Georgia.
- Ball, Joseph W. (1975)** *Professor of Anthropology*
A.B., Fordham University; M.A., Ph.D., University of Wisconsin.
- Banks, James H. (1976)** *Professor of Civil and Environmental Engineering*
B.E., Vanderbilt University; M.S., Ph.D., University of California, Berkeley.
- Barbone, Steven L. (1997)** *Assistant Professor of Philosophy*
B.S., University of Scranton; Ph.D., Marquette University.
- Bar-Lev, Zev (1979)** *Professor of Linguistics*
A.B., Columbia College; M.A., Cornell University; Ph.D., Indiana University.
- Barlow, Jessica A. (1997)** *Assistant Professor of Communicative Disorders*
B.A., M.A., Ph.D., Indiana University.
- Barnett, Andrew, H. (1983)** *Professor of Accountancy*
B.B.A., M.B.A., Baylor University; Ph.D., Texas Tech University.

- Barnett, Carol A. (1971)** *Professor of Biology*
A.B., Hendrix College; M.S., University of Arkansas Medical Center; Ph.D., University of Texas.
- Baron, Lawrence (1988)** *The Nasatir Professor of Modern Jewish History; Professor of History*
B.A., University of Illinois; M.A., Ph.D., University of Wisconsin.
- Barra, Donald P. (1983)** *Professor of Music*
A.B., University of Rochester; M.S., Juilliard School of Music; Ed.D., Columbia University.
- Barrera, Ernesto M. (1969)** *Professor of Spanish*
Doctor en Leyes, University of Cartagena, Colombia; M.A., Ph.D., University of Southern California.
- Barrio, Concepcion (1998)** *Assistant Professor of Social Work*
B.A., Loyola Marymount University; M.S.W., Ph.D., University of Southern California.
- Bart, Kenneth J. (1998)** *Professor of Public Health*
A.B., Middlebury College; M.P.H., M.S., Harvard University; M.D., State University of New York Health Science Center at Syracuse.
- Bartholomew, Francis M., Jr. (1967)** *Associate Professor of History*
A.B., University of California, Berkeley; M.A., Ph.D., Princeton University.
- Bayasi, M. Ziad (1990)** *Associate Professor of Civil and Environmental Engineering*
B.S., Damascus University, Syria; M.S., South Dakota State University; M.S., Ph.D., Michigan State University. Registered Professional Engineer.
- Bayles Martin, Debra Lynn (1996)** *Assistant Professor of Teacher Education*
B.S., M.A., Brigham Young University; Ph.D., University of Texas at Austin.
- Baylor, Amy L. (1997)** *Assistant Professor of Educational Technology*
B.A., Stanford University; Ph.D., University of South Carolina.
- Beach, Wayne A. (1984)** *Professor of Communication*
B.A., Drake University; M.A., University of Montana; Ph.D., University of Utah.
- Beard, Kelli Y. (1998)** *Assistant Professor of Special Education*
B.A., California State University, Long Beach; M.A., Pepperdine University; Ph.D., University of Oregon.
- Beatty, James R. (1973)** *Professor of Information and Decision Systems*
A.B., Franklin College; M.S., Indiana State University; Ph.D., University of Northern Colorado.
- Beck, Lawrence A. (1982, except F'85-S'86)** *Professor of Recreation, Parks and Tourism*
B.S., Humboldt State University; M.A., Azusa Pacific University; Ph.D., University of Minnesota.
- Beck, Leland L. (1980)** *Professor of Mathematical and Computer Sciences*
A.B., Rice University; M.A.S., Ph.D., Southern Methodist University.
- Bee, Clifford P. (1969)** *Professor of Teacher Education*
A.B., M.A., Western Michigan University; Ph.D., Michigan State University.
- Belasco, James A. (1971)** *Professor of Management*
B.S., Cornell University; M.B.A., Hofstra University; Ph.D., Cornell University.
- Belch, George E. (1980)** *Professor of Marketing*
B.S., Pennsylvania State University; M.S., University of Colorado; Ph.D., University of California, Los Angeles.
- Belch, Michael A. (1976)** *Professor of Marketing*
B.S., Pennsylvania State University; M.B.A., Drexel University; Ph.D., University of Pittsburgh.
- Bender, Stephen J. (1970)** *Professor of Public Health*
B.S., Brockport State University; M.S., H.S.D., Indiana University; M.P.H., University of California, Los Angeles.
- Benkov, Edith J. (1983)** *Professor of French*
B.A., M.A., Ph.D., University of California, Los Angeles.
- Bennett, Larry E. (1970)** *Professor of Chemistry*
B.S., San Diego State University; Ph.D., Stanford University.
- Berelowitz, Jo-Anne (1993)** *Associate Professor of Art*
B.A., University of Witwatersrand; M.A., Stanford University; Ph.D., University of California, Los Angeles.
- Berg, Marlowe J. (1970)** *Professor of Teacher Education*
B.S., M.A., Ph.D., University of Minnesota.
- Bernstein, Sanford I. (1983)** *Professor of Biology*
B.S., State University of New York at Stony Brook; Ph.D., Wesleyan University.
- Berry, Richard W. (1961)** *Professor of Geological Sciences*
B.S.E.M., Lafayette College; M.A., Ph.D., Washington University.
- Berta, Annalisa (1982)** *Professor of Biology*
B.A., University of Washington; Ph.D., University of California, Berkeley.
- Bertine, Kathe K. (1973)** *Professor of Geological Sciences*
A.B., Vassar College; M.A., M.Ph., Ph.D., Yale University.
- Beshgetoor, Donna L. (1996)** *Assistant Professor of Exercise and Nutritional Sciences*
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- Belancourt, Ramon (1984)** *Associate Professor of Electrical and Computer Engineering*
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- Bezuk, Nadine S. (1987)** *Professor of Teacher Education*
B.S., University of Pittsburgh; M.A., Ph.D., University of Minnesota.
- Bhattacharjee, Subrata (1991)** *Associate Professor of Mechanical Engineering*
B.Tech., Indian Institute of Technology, India; M.S., Ph.D., Washington State University.
- Bizzoco, Richard L. (1977)** *Professor of Biology*
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- Blair, Sue (1995)** *Director, Personnel Services*
B.A., San Diego State University.
- Blenner, Janet L. (1986)** *Professor of Nursing*
B.S.N., Long Island University; M.A., Ph.D., New York University.
- Block, Martin J. (1979)** *Director of Compliance and Policy Analysis, Student Affairs*
B.A., Indiana University; J.D., DePaul University.
- Block, Russell L. (1969)** *Associate Professor of Finance*
A.B., San Diego State University; J.D., University of California, Berkeley.
- Blue, Carroll Parrott (1984)** *Professor of Communication*
B.A., Boston University; M.F.A., University of California, Los Angeles.
- Bober, Marcie J. (1994, except F'95-S'96)** *Assistant Professor of Educational Technology*
A.B., University of Oregon; M.A., San Diego State University; Ph.D., Arizona State University.
- Boddy, Raford D. (1980)** *Professor of Economics*
A.B., University of California, Riverside; Ph.D., University of Michigan.
- Boe, Alfred F. (1968)** *Associate Professor of English and Comparative Literature*
A.B., M.A., Ph.D., University of Arizona.
- Boninsegni, Massimo (1997)** *Assistant Professor of Physics*
B.S., Università degli studi di Genova, Italy; Ph.D., Florida State University.
- Borden, Diane L. (1998)** *Associate Professor of Communication*
B.A., Colorado State University; M.A., Stanford University; Ph.D., University of Washington.
- Borges, Marilyn A. (1974)** *Professor of Psychology*
A.B., University of Hawaii; M.A., Ohio Wesleyan University; Ph.D., University of California, San Diego.
- Borkat, Roberta F. (1969)** *Professor of English*
A.B., Cornell University; Ph.D., University of California, San Diego.
- Borland, Carter A. (1997)** *Professor of Aerospace Studies*
B.S., Lamar University; M.S., Troy State University.
- Borrás, Isabel (1996)** *Assistant Professor of Spanish*
B.A., M.A., University of Valencia; Ph.D., Louisiana State University at Baton Rouge.
- Bost, John C. (1979)** *Professor of Finance*
B.S., San Diego State University; J.D., Hastings College of the San Francisco Law.
- Bowers, Janet Sue (1996)** *Assistant Professor of Mathematical and Computer Sciences*
B.A., Bucknell University; M.A., Villanova University; Ph.D., Vanderbilt University.
- Boyd, Richard B. (1996)** *Assistant Professor of Rhetoric and Writing Studies*
B.A., University of San Diego; Ph.D., University of California, San Diego.
- Boyd, William D. (1986)** *Director, Financial Aid*
B.A., M.Ed., Pennsylvania State University.
- Branca, Nicholas A. (1976)** *Professor of Mathematical and Computer Sciences*
B.S., Iona College; M.A.T., Harvard University; Ed.D., Teachers College, Columbia University.
- Breindl, Michael J. (1986)** *Professor of Biology*
M.S., University of Hamburg; Ph.D., Kiel University.
- Brodine, Stephanie Kay (1998)** *Professor of Public Health*
B.S., College of Wooster; M.D., Georgetown University.

Full-Time Faculty

- Brooks, Richard D. (1995)** Lecturer in Marketing
B.S., M.B.A., San Diego State University.
- Broom, Betty L. (1979, except F'85-S'86)** Associate Professor of Nursing
B.S.N., University of Illinois; M.S.N., University of Wisconsin, Madison; Ph.D., University of Texas at Austin.
- Broom, Glen M. (1979)** Professor of Communication
B.S., M.S., University of Illinois; Ph.D., University of Wisconsin.
- Brown, Harold K. (1971)** Associate Dean for Community Economic Development,
College of Business Administration
A.B., San Diego State University; M.B.A., Fordham University.
- Brunner, Eric J. (1995)** Assistant Professor of Economics
B.A., University of Connecticut; M.A., Ph.D., University of California, Santa Barbara.
- Bryson, Jeff B. (1970)** Professor of Psychology
A.B., University of Texas; M.S., Ph.D., Purdue University.
- Bryson, Rebecca B. (1972)** Associate Dean, College of Sciences;
Professor of Psychology
A.B., Queens College; M.S., Ph.D., Purdue University.
- Buck, Robert E. (1969)** Associate Professor of Sociology
B.S., M.S., Trinity University; Ph.D., University of Texas.
- Buckalew, James K. (1967)** Professor of Communication
A.B., M.A., Indiana State College; Ph.D., University of Iowa.
- Buckland, Timothy A. (1996)** Assistant Professor of Naval Science
B.A., University of Washington.
- Buono, Michael J. (1982)** Professor of Exercise and Nutritional Sciences and Biology
B.S., East Stroudsburg State College; M.S., University of Nevada; Ph.D., University of Arizona.
- Burgin, Alex B., Jr. (1998)** Assistant Professor of Biology
A.B., Wabash College; Ph.D., Indiana University.
- Burkett, Richard A. (1989)** Associate Professor of Art
B.A., Lawrence University; M.F.A., Indiana University, Bloomington.
- Burkey, David J. (1997)** Assistant Professor of Chemistry
B.S., Colorado School of Mines; M.S., Ph.D., Vanderbilt University.
- Burnett, Lowell J. (1972)** Professor of Physics
B.S., Portland State University; M.S., Ph.D., University of Wyoming.
- Burns, James S. (1994)** Assistant Professor of Mechanical Engineering
B.S., Pennsylvania State University; Ph.D., University of Delaware.
- Burns, Kevin (1998)** Assistant Professor of Biology
B.S., Texas A & M University; M.S., Louisiana State University; Ph.D., University of California, Berkeley.
- Burt, Sharon D. (1987)** Lecturer in Nursing
B.S., San Francisco State University; M.S.N., University of San Diego.
- Butler, David H. (1981)** Professor of Accountancy
B.S., University of Cincinnati; M.B.A., Indiana University; Ph.D., University of Cincinnati.
- Butler, Gerald J. (1968)** Professor of English
A.B., University of California, Berkeley; M.A., Ph.D., University of Washington.
- Butler, Mark C. (1981)** Professor of Management
B.A., M.A., San Diego State University; Ph.D., Texas Christian University.
- Calavita, Nico (1980)** Professor of Public Administration and Urban Studies
Ph.D., University of Florence, Italy.
- Calfas, Karen (1992)** Director of Health Promotion, Student Health Services
B.A., Pacific Lutheran University; Ph.D., San Diego State University and University of California, San Diego.
- Camara, Madeline (1997)** Assistant Professor of Spanish,
Imperial Valley Campus
B.A., Universidad de la Habana, Cuba; M.A., Colegio de Mexico; Ph.D., State University of New York at Stony Brook.
- Capettini, Robert J. (1985)** The PricewaterhouseCoopers Alumni Professor of Accountancy
B.B.A., M.B.A., University of Toledo; Ph.D., University of Illinois at Urbana-Champaign.
- Car, Michael A. (1981)** Records Officer and Judicial Coordinator
B.A., California State University, Los Angeles; M.A., Ph.D., Claremont Graduate School.
- Carande, Robert J. (1987)** Associate Librarian
B.A., M.L.S., State University of New York at Buffalo; M.A., State University of New York at Stony Brook.
- Cardenas, Miguel A. (1981)** Executive Director, International Training Center,
College of Extended Studies
B.S.E.E., San Diego State University; M.S., Ph.D., University of California, Los Angeles.
- Cargille, Douglas A. (1978)** Librarian
A.B., University of California, Irvine; M.A., M.L.S., University of California, Los Angeles.
- Carlson, B. Robert (1978)** Professor of Exercise and Nutritional Sciences
B.A., Trinity University; M.Ed., Ph.D., University of Texas at Austin.
- Carlson, David H. (1982)** Professor of Mathematical and Computer Sciences
A.B., San Diego State University; M.S., Ph.D., University of Wisconsin.
- Carpenter, John J. (1975)** Director, Public Safety
A.B., Eastern Washington State College.
- Carroll, John L. (1979)** Professor of Mathematical and Computer Sciences
B.S., Northern Arizona University; M.S., Ph.D., University of Nebraska.
- Carruthers, David V. (1995)** Assistant Professor of Political Science
B.A., Southern Oregon University; M.A., Ph.D., University of Oregon.
- Castañeda, Donna (1993)** Assistant Professor of Psychology, Imperial Valley Campus
B.A., University of Washington; M.A., Ph.D., University of California, Davis.
- Castillo, José (1987)** Associate Professor of Mathematical and Computer Sciences
B.S., Universidad Central de Venezuela; M.A., University of Texas at Austin; Ph.D., University of New Mexico.
- Castle, Evangeline M. (1996)** Associate Director, Educational Opportunity and Ethnic Affairs
B.A., Grambling State University; M.A., Ohio University; Ph.D., Texas A & M University.
- Caves, Roger W. (1983)** Professor of Public Administration and Urban Studies
B.A., M.U.S., Old Dominion University; Ph.D., University of Delaware.
- Cayleff, Susan E. (1987)** Professor of Women's Studies
B.A., University of Massachusetts at Amherst; M.A., Sarah Lawrence College; M.A., Ph.D., Brown University.
- Cegelka, Patricia T. (1980)** Professor of Special Education
B.S., M.S., Ed.D., University of Kansas.
- Chaffin, Deborah G. (1984)** Associate Professor of Philosophy
B.A., University of Oklahoma; Ph.D., State University of New York, Stony Brook.
- Chambers, Martin J. (1986)** Professor of Music
B.M., M.M., University of British Columbia.
- Chambers, Norman E. (1972)** Professor of Africana Studies
A.B., Lincoln University; M.A., San Diego State University; Ph.D., United States International University.
- Chamley, John D. (1969)** Professor of Administration,
Rehabilitation and Postsecondary Education
A.B., Pacific Lutheran University; M.A., Ed.D., Arizona State University.
- Chandler, Shelly E. (1966)** Associate Professor of Sociology
A.B., M.A., Ph.D., University of California, Los Angeles.
- Chang, Albert (1991)** Professor of Public Health
B.A., Harvard University; M.P.H., University of California, Berkeley; M.D., University of Rochester.
- Chang, Ching-Ten (1979)** Professor of Electrical and Computer Engineering
B.S., National Taiwan Normal University; M.S., North Dakota State University; Ph.D., University of Washington.
- Chang, Howard H. (1967)** Professor of Civil and Environmental Engineering
B.S., Cheng Kung University, China; M.S., Ph.D., Colorado State University. Registered Professional Engineer.
- Chatfield, Dale A. (1978)** Associate Professor of Chemistry
A.B., M.S., Oakland University, Michigan; Ph.D., University of North Carolina, Chapel Hill.
- Chavez, Augustine S. (1974)** Director, Educational Opportunity and Ethnic Affairs;
Student Affirmative Action Officer
A.B., Jacinto Trevino College.
- Cheek, William F. (1968)** Professor of History
A.B., Hampden-Sydney College; M.A., University of Richmond; Ph.D., University of Virginia.
- Chen, Lo-chai (1969)** Professor of Biology
B.S., National Taiwan University; M.S., University of Alaska; Ph.D., University of California, San Diego.
- Chen, Milton M. (1977)** Professor of Information and Decision Systems
B.S., National University, Taipei; M.B.A., DePaul University, Chicago; Ph.D., New York University.

- Cheng, Li-Rong Lilly (1984)** *Assistant Director, Global Program Development, College of Extended Studies; Professor of Communicative Disorders*
B.A., National Taiwan University; M.A., Southern Illinois University; M.A., Michigan State University; Ph.D., Claremont Graduate School and San Diego State University.
- Cherin, Antony C. (1982)** *Professor of Finance*
B.A., Colorado College; M.B.A., Ph.D., University of Colorado, Boulder.
- Chin, Marilyn (1987)** *Professor of English and Comparative Literature*
B.A., University of Massachusetts at Amherst; M.F.A., University of Iowa.
- Chizhik, Estella W. (1997)** *Assistant Professor of Teacher Education*
B.A., University of California, Riverside; M.A., Ph.D., University of California, Los Angeles.
- Choi, Sooja (1987)** *Professor of Linguistics*
B.A., Sacred Heart Women's College; M.A., Seoul National University; Ph.D., State University of New York.
- Chou, Fang-Hui (1969)** *Professor of Civil and Environmental Engineering*
B.S., National Taiwan University; M.S., University of Minnesota; Ph.D., Northwestern University. Registered Professional Engineer.
- Chow, Chee W. (1984)** *The Vern E. Odmark Chair in Accountancy; Professor of Accountancy*
A.B., Dartmouth College; M.B.A., Amos Tuck School, Dartmouth; M.S., University of Rochester; Ph.D., University of Oregon.
- Christensen, C. Ben (1968)** *Professor of Spanish*
B.A., M.A., Brigham Young University; Ph.D., University of Washington.
- Christensen, Kathee M. (1978)** *Professor of Communicative Disorders*
A.B., MacMurray College, Ill.; M.S., University of Wisconsin; Ph.D., Claremont Graduate School.
- Chu, Paochin (1967)** *Professor of History*
A.B., National Taiwan University; M.A., Ph.D., University of Pennsylvania.
- Clapp, James A. (1968)** *Professor of Public Administration and Urban Studies*
B.S., Le Moyne College; M.R.P., Ph.D., Syracuse University.
- Clapp, John D. (1997)** *Assistant Professor of Social Work*
B.A., M.S.W., San Diego State University; Ph.D., The Ohio State University.
- Clement, Lisa L. (1998)** *Assistant Professor of Teacher Education*
B.S., College of William and Mary; M.A., San Diego State University.
- Clement, Norris C. (1968)** *Professor of Economics*
A.B., Sacramento State University; Ph.D., University of Colorado.
- Cobb, Larry G. (1975)** *Assistant Dean for Special Sessions, Extension and Professional Development, College of Extended Studies*
A.B., M.A., University of Iowa.
- Cobble, James W. (1973)** *Vice President for Research and Dean, Graduate Division; Professor of Chemistry*
A.B., Northern Arizona University; M.S., University of Southern California; Ph.D., University of Tennessee and Oak Ridge Institute of Nuclear Studies.
- Cobbs Hoffman, Elizabeth (1998)** *The Dwight E. Stanford Chair in American Foreign Relations; Professor of History*
B.A., University of California, San Diego; M.A., Ph.D., Stanford University.
- Cole, Thomas E. (1986)** *Associate Professor of Chemistry*
B.S., Purdue University; Ph.D., University of Texas at Austin.
- Coleman, Kathleen L. (1973)** *Librarian*
A.B., Stanford University; M.A., M.S.L.S., University of Wisconsin.
- Colquitt, Clare (1986)** *Associate Professor of English*
B.A., Texas Christian University; M.A., Ph.D., University of Texas at Austin.
- Colston, Stephen A. (1977)** *Associate Professor of History*
A.B., University of San Diego; M.A., University of Chicago; M.L.S., Ph.D., University of California, Los Angeles.
- Colwill, Elizabeth A. (1989)** *Associate Professor of History*
B.A., The Evergreen State College; M.A., Ph.D., State University of New York at Binghamton.
- Conly, John F. (1962)** *Professor of Aerospace Engineering and Engineering Mechanics*
B.S.M.E., M.S.M.E., University of Pennsylvania; Ph.D., Columbia University.
- Conniff, James J. (1968)** *Professor of Political Science*
A.B., M.A., Rutgers University; Ph.D., Columbia University.
- Conte, Jeffrey M. (1998)** *Assistant Professor of Psychology*
B.A., University of Virginia; M.S., Ph.D., Pennsylvania State University.
- Cook, Sandra A. (1994)** *Director, University Advising Center*
B.S., M.A., Ph.D., Loyola University of Chicago.
- Cook-Morales, Valerie J. (1984)** *Professor of Counseling and School Psychology*
B.S., Valparaiso University; M.A., M.Ed., Ph.D., Columbia University.
- Cooling, Janet L. (1984)** *Professor of Art*
B.F.A., Pratt Institute; M.F.A., School of the Art Institute of Chicago.
- Corlett, J. Angelo (1997)** *Assistant Professor of Philosophy*
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- Cornejo, Ricardo J. (1978)** *Professor of Teacher Education*
B.A., University of Chile; M.A., Michigan State University; Ph.D., University of Texas at Austin.
- Cornforth, Brian D. (1996)** *Lecturer in Management*
B.A., University of Pennsylvania; M.S., Boston University; M.B.A., San Diego State University; Ph.D., University of Texas at Arlington.
- Cornwell, JoAnne (1984)** *Associate Professor of French and Africana Studies*
B.A., M.A., Ph.D., University of California, Irvine.
- Cotten, Walter E. (1978)** *Professor of Art*
A.B., M.F.A., University of California, Santa Barbara.
- Cottrell, Ann B. (1967)** *Professor of Sociology*
A.B., Miami University, Ohio; M.A., Ph.D., Michigan State University.
- Cox, Thomas J. (1975)** *Professor of French*
B.A., M.A., Case Western Reserve University; Ph.D., The University of Chicago.
- Craig, George T. (1968)** *Professor of Mechanical Engineering*
B.S., Pennsylvania State University; M.S., Ph.D., Louisiana State University.
- Cronan, Thereasa A. (1985)** *Professor of Psychology*
B.A., M.A., San Diego State University; Ph.D., Michigan State University.
- Cummins, Emery J. (1966)** *Professor of Counseling and School Psychology*
A.B., Wheaton College; M.S., University of Southern California; Ph.D., Michigan State University.
- Cummins-Lewis, June (1996)** *Assistant Professor of English*
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- Cunniff, Roger L. (1967)** *Professor of History*
A.B., M.A., Colorado State College; Ph.D., University of Texas.
- Cutter, Charles H. (1968)** *Associate Professor of Humanities and Political Science*
A.B., M.A., University of California, Berkeley; Ph.D., University of California, Los Angeles.
- Dahms, A. Stephen (1972)** *Professor of Chemistry*
B.S., College of St. Thomas; Ph.D., Michigan State University.
- Daub, Clarence T., Jr. (1967)** *Professor of Astronomy*
A.B., Carleton College; Ph.D., University of Wisconsin.
- Daugherty, JoAnn S. (1994)** *Lecturer in Nursing*
B.S., Millsaps College; B.S.N., University of Mississippi; M.S.N., Ph.D., University of California, San Francisco.
- Daugherty, Wayne F., Jr. (1966)** *Associate Professor of Biology*
A.B., California State University, Long Beach; Ph.D., Johns Hopkins University.
- Davies, Thomas M., Jr. (1968)** *Professor of History*
A.B., M.A., University of Nebraska; Ph.D., University of New Mexico.
- Davis, Glover T., II (1966)** *Professor of English*
A.B., California State University, Fresno; M.F.A., University of Iowa.
- Davis, Jeffrey A. (1977)** *Professor of Physics*
B.S., Rensselaer Polytechnic Institute; Ph.D., Cornell University.
- Davis, Joel J. (1990)** *Associate Professor of Communication*
B.S., University of Illinois at Urbana-Champaign; Ph.D., University of Chicago.
- Davis, Roger A. (1992)** *Professor of Biology*
B.S., University of Delaware; M.S., University of Minnesota; Ph.D., Washington State University.
- Day, Steven M. (1988)** *The Rollin and Caroline Eckis Chair in Seismology; Professor of Geological Sciences*
B.S., University of Southern California; Ph.D., University of California, San Diego.
- Dean, Alfred (1985)** *Professor of Social Work*
B.A., University of Connecticut; M.A., Ph.D., University of North Carolina at Chapel Hill.
- Defran, Richard H. (1970)** *Associate Professor of Psychology*
A.B., Loyola University; M.A., Ph.D., Bowling Green State University.

Full-Time Faculty

- DeGennaro, Maria R. (1980)** *Professor of Social Work*
B.A., M.S.W., University of Minnesota; Ph.D., University of Texas.
- De la Luz Ibarra, Maria (1997)** *Assistant Professor of Chicana and Chicano Studies*
B.A., M.A., Ph.D., University of California, Santa Barbara.
- Del Castillo, Adelaida R. (1990)** *Associate Professor of Chicana and Chicano Studies*
A.B., M.A., Ph.D., University of California, Los Angeles.
- De Noble, Alex F. (1983)** *Professor of Management*
B.S., Monmouth College; M.A., Ph.D., Virginia Polytechnic Institute.
- De Peyster, Ann (1983)** *Professor of Public Health*
B.A., Pomona College; M.S., Ph.D., University of California, Berkeley.
- Deutschman, Douglas H. (1997)** *Assistant Professor of Biology*
B.A., University of Pennsylvania; M.S., Bowling Green State University; Ph.D., Cornell University.
- Dexter, Deborah M. (1967)** *Professor of Biology*
A.B., M.A., Stanford University; Ph.D., University of North Carolina.
- DiBona, Leslie F. (1994)** *Director of Development, Library*
A.B., Boston University; M.S.L.S., Simmons College.
- Diffendorfer, James (1998)** *Assistant Professor of Biology*
B.S., Ohio University; Ph.D., University of Kansas.
- Dintrone, Charles V. (1972)** *Librarian*
A.B., M.A., University of California, Los Angeles; M.L.S., University of California, Berkeley.
- Dintrone, Patricia N.L. (1989)** *Assistant Dean for Student Affairs, College of Business Administration*
A.B., University of California, Los Angeles; M.A., University of Virginia; M.B.A., San Diego State University; Ph.D., University of Virginia.
- Dionisopoulos, George N. (1985)** *Professor of Communication*
B.A., M.A., San Diego State University; Ph.D., Purdue University.
- Dixon, Jesse T. (1979)** *Professor of Recreation, Parks and Tourism*
B.S., M.Ed., Ph.D., University of Illinois.
- Do, Andrew Q. (1990)** *Professor of Finance*
B.S., Emporia State University; B.S., Kansas State University; M.S., M.B.A., Ph.D., Louisiana State University.
- Dobbs, Matti F. (1990)** *Associate Professor of Public Administration and Urban Studies*
B.A., Morgan State University; M.S.W., Rutgers University; Ph.D., University of Southern California.
- Dodge, Bernard J. (1980)** *Professor of Educational Technology*
B.S., Worcester Polytechnic Institute; M.S., Ph.D., Syracuse University.
- Dominguez, Jesus Y. (1976)** *Professor of Art*
B.F.A., M.F.A., Otis Art Institute of Los Angeles.
- Donahue, Thomas S. (1968)** *Professor of Linguistics*
A.B., Denison University; M.A., Miami University, Ohio; Ph.D., Ohio State University.
- Donald, John D. (1978)** *Professor of Mathematical and Computer Sciences*
A.B., Harvard University; Ph.D., University of California, Berkeley.
- Dorman, Clive E. (1974)** *Professor of Geological Sciences*
A.B., University of California, Riverside; M.S., Ph.D., Oregon State University.
- Dowler, Michael J. (1971)** *Professor of Biology*
A.B., Ph.D., University of California, Santa Barbara.
- Downey, Carolyn J. (1988)** *Associate Professor of Administration, Rehabilitation and Postsecondary Education*
B.A., Pasadena College; M.S., University of Southern California; Ph.D., Arizona State University.
- Dozier, David M. (1980)** *Professor of Communication*
A.B., University of California, Berkeley; M.A., California State University, Fresno; M.A., Ph.D., Stanford University.
- Dreger, Megan (1997)** *Senior Assistant Librarian*
B.A., University of Oregon; M.S.L.S., University of North Carolina at Chapel Hill.
- Duncan, Mary R. (1973)** *Professor of Recreation, Parks and Tourism*
A.B., San Diego State University; M.S., San Francisco State University; Ph.D., United States International University.
- Dunn, Craig P. (1991)** *Associate Professor of Management*
B.S., California State University, Long Beach; M.B.A., California State University, Bakersfield; Ph.D., Indiana University at Bloomington.
- Dunn, Roger M. (1983)** *Professor of Psychology, Imperial Valley Campus*
B.A., San Diego State University; M.A., Ph.D., University of California, San Diego.
- Dunn, Ross E. (1968)** *Professor of History*
A.B., State University of New York at Albany; M.A., Ph.D., University of Wisconsin.
- Dunster, T. Marc (1988)** *Professor of Mathematical and Computer Sciences*
B.S., University of Reading; Ph.D., University of Bristol.
- Durbin, Gregory C. (1989)** *Professor of Communication*
B.A., M.F.A., University of California, San Diego.
- Dutton, Brenton P. (1981)** *Professor of Music*
B.A., M.M., Oberlin Conservatory of Music.
- Easton, Annette C. (1987)** *Associate Professor of Information and Decision Systems*
B.S., California State University, Fresno; Ph.D., University of Arizona.
- Easton, George K. (1987)** *Associate Professor of Information and Decision Systems*
A.B., San Diego State University; M.I.M., American Graduate School of International Management; Ph.D., University of Arizona.
- Ebert, Thomas A. (1969)** *Professor of Biology*
B.S., University of Wisconsin; M.S., Ph.D., University of Oregon.
- Eckberg, Carl F. (1969)** *Associate Professor of Mathematical and Computer Sciences*
A.B., Cornell University; M.S., Ph.D., Purdue University.
- Edson, Laurie D. (1988)** *Professor of English and Comparative Literature and French*
B.A., University of Wisconsin; M.A., University of California, Irvine; Ph.D., Stanford University.
- Edwards, Sharon L. (1980)** *Assistant Vice President for Student Affairs*
B.A., M.P.A., San Diego State University.
- 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.
- Ehrlich, Sanford B. (1986)** *Associate Professor of Management*
B.A., State University College at Fredonia; M.A., George Washington University; M.B.A., Ph.D., State University of New York at Buffalo.
- Eisner, Robert E. (1970)** *Professor of Classics and Humanities*
A.B., St. Peter's College; M.A., Ph.D., Stanford University.
- Elder, John P. (1984)** *Professor of Public Health*
B.A., University of Nebraska; M.A., Ph.D., West Virginia University; M.P.H., Boston University.
- Elizondo, Sergio D. (1994)** *Professor of Spanish, Imperial Valley Campus*
B.A., Findlay College; M.A., Ph.D., University of North Carolina at Chapel Hill.
- Elwin, John D. (1969)** *Professor of Mathematical and Computer Sciences*
B.S., University of Washington; Ph.D., Oregon State University.
- Ely, David P. (1986)** *Professor of Finance*
B.S., West Virginia University; M.S., Ph.D., Ohio State University.
- Emerich, Carl F. (1974)** *Associate Vice President for Student Affairs*
A.B., M.S., University of Southern California.
- Emerick, Robert E. (1968)** *Professor of Sociology*
A.B., University of California, Santa Barbara; Ph.D., Northwestern University.
- Espin, Oliva M. (1990)** *Professor of Women's Studies*
B.A., Universidad de Costa Rica; M.Ed., Ed.S., Ph.D., University of Florida.
- Espinosa, Ruben W. (1978)** *Professor of Policy Studies in Language and Cross-Cultural Education*
A.B., University of California, Riverside; M.A., Ph.D., Stanford University.
- Esser, Janet B. (1975)** *Professor of Art*
B.F.A., University of Iowa; B.S., Kent State University; M.A., California State University, Long Beach; Ph.D., University of California, Los Angeles.
- Etzel, Paul B. (1986)** *Professor of Astronomy*
B.S., Washburn University of Topeka; M.S., San Diego State University; Ph.D., University of California, Los Angeles.
- Evans, Ronald W. (1989)** *Associate Professor of Teacher Education*
B.A., M.S., Oklahoma State University; Ed.D., Stanford University.
- Fairlie, Lyndelle D. (1973)** *Associate Professor of Political Science*
B.A., Drew University; M.A., Johns Hopkins University; Ph.D., Indiana University.
- Farber, Gerald H. (1968)** *Professor of English and Comparative Literature*
A.B., University of California, Los Angeles; M.A., California State University, Los Angeles; Ph.D., Occidental College.
- Farman, Nancy (1989)** *Professor of Teacher Education*
B.S., Wright State University; M.A., San Diego State University; Ph.D., San Diego State University and Claremont Graduate School.

- Fatemi, Khosrow (1998)** *Dean, Imperial Valley Campus; Professor of Management, Imperial Valley Campus*
B.A., Abadan Institute of Technology; M.B.A., Ph.D., University of Southern California.
- Fearn, Leif (1967)** *Professor of Teacher Education*
B.S., Shippensburg State College, Pennsylvania; M.A., Ed.D., Arizona State University.
- Feenberg, Andrew L. (1969)** *Professor of Philosophy*
A.B., Johns Hopkins University; M.A., Ph.D., University of California, San Diego.
- Feinberg, Lawrence B. (1977)** *Associate Vice President for Research and Technology Services, Graduate and Research Affairs; Professor of Counseling and School Psychology*
A.B., University of Buffalo; M.S., Ph.D., State University of New York at Buffalo.
- Feinberg, Lynn Jenkins (1980)** *Counselor*
A.B., M.S., San Diego State University.
- Fenson, Larry (1975)** *Professor of Psychology*
A.B., M.A., University of New Mexico; Ph.D., University of Iowa.
- Ferguson, John B. (1984)** *Lecturer in Physics*
B.S., M.S., San Diego State University.
- Ferraro, Joanne M. (1984)** *Professor of History*
B.A., M.A., Ph.D., University of California, Los Angeles.
- Fikes, Robert, Jr. (1977)** *Librarian*
B.S., Tuskegee Institute; M.A., M.A.L.S., University of Minnesota.
- Finnegan, Daniel J. (1990)** *Associate Professor of Social Work*
B.S., M.S.W., Ph.D., University of Illinois at Urbana-Champaign.
- Fisher, Douglas (1998)** *Assistant Professor of Teacher Education*
B.A., San Diego State University; E.M.B.A., Claremont Graduate School; Ph.D., San Diego State University and Claremont Graduate School.
- Fisher, Kathleen M. (1988)** *Professor of Biology*
B.S., Rutgers University; Ph.D., University of California, Davis.
- 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.
- Flagg, Joan M. (1969)** *Associate Professor of Nursing*
B.S.N., University of Iowa; M.S., University of California, San Francisco; Ph.D., University of Texas at Austin.
- Flatley, Marie E. (1979)** *Professor of Information and Decision Systems*
B.B.A., M.A., Ph.D., University of Iowa.
- Flood, James (1982)** *Professor of Teacher Education*
A.B., Catholic University of America; M.A., New York University; Ph.D., Stanford University.
- Follingstad, Karen J. (1984)** *Professor of Music*
B.M., Curtis Institute of Music; M.M., Indiana University; D.M.A., University of Texas at Austin.
- Ford, Lawrence R. (1970)** *Professor of Geography*
B.Sc., M.A., Ohio State University; Ph.D., University of Oregon.
- Francescotti, Robert M. (1996)** *Assistant Professor of Philosophy*
B.A., M.A., Ph.D., Syracuse University.
- Francis, Peter R. (1981)** *Professor of Exercise and Nutritional Sciences*
B.S., University of Durham, England; M.A., University of Iowa; Ph.D., University of Oregon.
- Franklin, Janet (1988)** *Professor of Geography*
B.A., M.A., Ph.D., University of California, Santa Barbara.
- Frantz, Roger S. (1978)** *Professor of Economics*
A.B., M.A., Pace University; Ph.D., Washington State University.
- Franz, Edward P. (1965)** *Associate Professor of Exercise and Nutritional Sciences*
B.S., M.A., Washington University.
- Franzini, Louis R. (1969)** *Professor of Psychology*
B.S., University of Pittsburgh; M.A., University of Toledo; Ph.D., University of Pittsburgh.
- Frase, Larry E. (1987)** *Professor of Administration, Rehabilitation and Postsecondary Education*
B.A., University of Arizona; M.A., Ed.D., Arizona State University.
- Fredrich, Barbara E. (1972)** *Professor of Geography*
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- Freitas, Lorraine (1984)** *Associate Professor of Nursing*
B.S., Catholic University of America; M.A., University of California, Los Angeles; Ph.D., University of Texas at Austin.
- Frey, Terrence G. (1986)** *Professor of Biology*
B.S., Ohio State University; Ph.D., University of California, Los Angeles.
- Frick, Pieter A. (1995)** *Dean, College of Engineering; Professor of Electrical and Computer Engineering*
B.Sc.B.Eng., M.Eng., University Stellenbosh, South Africa; D.I.C., Imperial College, London; Ph.D., University of London.
- Friedman, Catherine R. (1988)** *Associate Librarian*
B.A., M.S., University of Illinois at Urbana-Champaign.
- Friedrichs, Charles J. (1983)** *Lecturer in Music*
B.A., California State University, Fullerton; M.A., San Diego State University.
- Friend, Margaret (1997)** *Assistant Professor of Psychology*
B.A., University of South Florida; M.S., Ph.D., University of Florida.
- Frost, Eric G. (1980)** *Associate Professor of Geological Sciences*
A.B., University of Washington; M.S., University of Arizona; Ph.D., University of Southern California.
- Fullerton, Theo F. (1986)** *Career Counselor*
B.A., Principia College; M.Ed., D.Ed., Pennsylvania State University.
- Funicello, Ralph (1991)** *The Don W. Powell Chair in Scene Design*
B.F.A., New York University.
- Gamble, Lynn H. (1997)** *Assistant Professor of Anthropology*
B.A., University of California, Berkeley; M.A., Ph.D., University of California, Santa Barbara.
- Ganster, Paul (1984)** *Director, Institute for Regional Studies of the Californias*
B.A., Yale University; M.A., University of California, Riverside; Ph.D., University of California, Los Angeles.
- Garrison, Leslie (1991)** *Associate Professor of Education, Imperial Valley Campus*
B.S., M.S., University of Oregon; Ed.D., Boston University.
- Gattas, Joyce M. (1982)** *Dean, College of Professional Studies and Fine Arts; Professor of Recreation, Parks and Tourism*
B.A., M.S., University of New Mexico; Ph.D., University of California, Berkeley.
- Gay, Phillip T. (1976)** *Associate Professor of Sociology*
A.B., Case Western Reserve University; M.A., Ph.D., Harvard University.
- Gazell, James A. (1968)** *Professor of Public Administration and Urban Studies*
A.B., M.A., Roosevelt University; Ph.D., Southern Illinois University.
- Geist, Patricia J. (1990)** *Professor of Communication*
B.A., University of Iowa; M.A., University of Northern Iowa; Ph.D., Purdue University.
- Gellens, Jay H. (1961)** *Professor of English*
A.B., Kenyon College; M.A., Ph.D., Yale University.
- Genovese, E. Nicholas (1970)** *Professor of Classics and Humanities*
A.B., Xavier University; Ph.D., Ohio State University.
- Gerber, James B. (1985)** *Associate Professor of Economics*
B.A., California State University, Chico; Ph.D., University of California, Davis.
- Gersberg, Richard M. (1986)** *Professor of Public Health*
B.S., The City College of the City University of New York; M.S., University of Houston; Ph.D., University of California, Davis.
- Gervais, Ronald J. (1969)** *Professor of English*
A.B., M.A., Michigan State University; Ph.D., University of Oregon.
- Getis, Arthur (1990)** *The Stephen and Mary Birch Foundation Chair in Geographical Studies; Professor of Geography*
B.S., M.S., Pennsylvania State University; Ph.D., University of Washington.
- Geveci, Tunc (1985)** *Professor of Mathematical and Computer Sciences*
B.S., Middle East Technical University; M.A., Ph.D., University of California, San Diego.
- Ghorpade, Jaisingh V. (1965)** *Professor of Management*
A.B., University of Poona, India; M.B.A., Ph.D., University of California, Los Angeles.
- Gilbert, Kay R. (1979, except F'80-S'81 and F'83-S'86)** *Assistant Professor of Nursing*
B.S.N., M.S.N., University of Alabama in Birmingham; Ph.D., University of Texas at Austin.
- Gilbreath, Stuart H. (1968)** *Professor of Public Administration and Urban Studies*
A.B., Pacific Lutheran College; B.D., Pacific Lutheran Theological Seminary; Ph.D., Michigan State University.
- Girty, Gary H. (1984)** *Professor of Geological Sciences*
B.A., M.S., California State University, Fresno; M.Phil., Ph.D., Columbia University.
- Gitchoff, G. Thomas (1969)** *Professor of Public Administration and Urban Studies*
A.B., Central Methodist College; M.Crim., D.Crim., University of California, Berkeley.
- Gitman, Lawrence J. (1989)** *Professor of Finance*
B.S., Purdue University; M.B.A., University of Dayton; Ph.D., University of Cincinnati.

Full-Time Faculty

- Glazer, Jeffrey W. (1994)** *Assistant Dean for Student Relations, College of Business Administration; Lecturer in Management*
B.A., University of Iowa; M.B.A., San Diego State University; Ed.D., University of San Diego.
- Glembotski, Christopher C. (1986)** *Professor of Biology*
B.S., California Polytechnic State University; Ph.D., University of California, Los Angeles.
- Golbeck, Amanda L. (1983)** *Professor of Mathematical and Computer Sciences*
B.A., Grinnell College; M.A. (Anthropology), M.A. (Statistics), Ph.D., University of California, Berkeley.
- Goldberg, Fred M. (1986)** *Professor of Physics*
B.S., M.S., Ph.D., University of Michigan.
- Golden, Kenneth M. (1998)** *Assistant Dean for Student Affairs, College of Health and Human Services*
B.A., Tulane University; M.S.W., University of Arkansas at Little Rock; Ed.D., University of Arkansas at Fayetteville.
- Goyne, Carol L. (1969)** *Associate Librarian*
A.B., M.A., San Diego State University; M.S.L.S., University of Southern California.
- Graef, Katherine J. (1998)** *Assistant Professor of Military Science*
B.A., University of Texas at Austin.
- Graf, Richard G. (1968)** *Professor of Psychology*
A.B., Fairleigh Dickinson University; M.A., Connecticut College; Ph.D., University of Massachusetts.
- Graham, William K. (1973)** *Professor of Psychology*
A.B., Willamette University; M.A., University of Illinois; Ph.D., Wayne State University.
- Graves, Anne W. (1990)** *Professor of Special Education*
B.A., Randolph-Macon College; M.Ed., University of Virginia; Ph.D., University of Wisconsin, Madison.
- Green, Louis C. (1976)** *Professor of Economics*
A.B., M.A., California State University, Los Angeles; Ph.D., University of California, Berkeley.
- Greenfeld, Philip J. (1969)** *Professor of Anthropology*
A.B., Pasadena College; M.A., Ph.D., University of Arizona.
- Gregory, Sinda J. (1977, except S'84)** *Professor of English*
B.A., University of New Mexico; M.A., Ph.D., University of Illinois.
- Griffin, Ernst C. (1972)** *Professor of Geography; Faculty Athletic Representative*
A.B., San Diego State University; M.A., University of Denver; Ph.D., Michigan State University.
- Griffin, Ronald W. (1967)** *Professor of Social Work*
A.B., Texas Technological College; B.D., Golden Gate Baptist Seminary; M.S.S.W., University of Texas; Ph.D., Florida State University.
- Grisham, Dana (1997)** *Assistant Professor of Teacher Education*
B.A., California State University, Long Beach; M.A., Ph.D., University of California, Riverside.
- Griswold, Jerome J. (1980)** *Professor of English*
B.A., Seattle University; M.A., Ph.D., University of Connecticut.
- Griswold del Castillo, Ricardo (1974)** *Professor of Chicana and Chicano Studies*
A.B., M.A., Ph.D., University of California, Los Angeles.
- Grone, Robert D. (1986)** *Professor of Mathematical and Computer Sciences*
B.A., M.S., California State University, Northridge; Ph.D., University of California, Santa Barbara.
- Grossbard-Shechtman, Shoshana A. (1981)** *Professor of Economics*
B.A., Hebrew University; Ph.D., University of Chicago.
- Grothjahn, Douglas B. (1997)** *Assistant Professor of Chemistry*
B.A., Reed College; Ph.D., University of California, Berkeley.
- Grudnitski, Gary M. (1988)** *Professor of Accountancy*
B.Comm., M.B.A., University of Saskatchewan; Ph.D., University of Massachusetts.
- Guanipa, Carmen L. (1996)** *Assistant Professor of Counseling and School Psychology*
B.A., University of Zulia Maracaibo, Venezuela; M.A., Ph.D., McGill University.
- Guentzler, William D. (1968)** *Student Services Professional; Professor of Industrial Technology*
B.S., M.A., Kent State University; Ph.D., Ohio State University.
- Gumbiner, Judith G. (1967)** *Director, Career Services*
A.B., M.A., San Diego State University.
- Gupta, Dipak K. (1977)** *Professor of Public Administration and Urban Studies*
A.B., University of Calcutta; M.A., Visva-Bharati University; M.A., Ph.D., University of Pittsburgh.
- Gurley, Michael J. (1998)** *Associate Professor of Naval Science*
B.S., Santa Clara University; M.B.A., University of La Verne; M.A., Naval Postgraduate School.
- Guroi, Mirat D. (1997)** *The Blasker Chair in Environmental Engineering; Professor of Civil and Environmental Engineering*
B.S., M.S., Middle East Technical University, Ankara; M.S.E.E., Ph.D., University of North Carolina at Chapel Hill.
- Gutierrez-Clellen, Vera F. (1990)** *Associate Professor of Communicative Disorders*
M.A., Universidad del Museo Social Argentino; Ph.D., Temple University.
- Güven, Halil M. (1984)** *Professor of Mechanical Engineering*
B.S., Bogaziccai University, Turkey; M.S., Mississippi State University; Ph.D., University of Houston.
- Haddad, Kamal M. (1981)** *Professor of Finance*
B.B.A., American University of Beirut; M.S., Ph.D., University of Nebraska.
- Hadley, Sue A. (1985)** *Associate Professor of Nursing*
B.S., University of Texas at San Antonio; M.S., Ball State University; D.N.S., Indiana University - Purdue University at Indianapolis.
- Hager, Richard A. (1970)** *Professor of Mathematical and Computer Sciences*
B.Phys., Ph.D., University of Minnesota.
- Hall, Laura J. (1998)** *Associate Professor of Special Education*
B.A., Rutgers, The State University of New Jersey; M.A., Lesley College; Ph.D., University of Massachusetts.
- Hambleton, John W. (1969)** *Associate Professor of Economics*
A.B., Boston College; M.A., Ph.D., University of Wisconsin.
- Hamilton, Charles D. (1974)** *Professor of History and Classics*
A.B., Fordham University; M.A., Ph.D., Cornell University.
- Hampton, David R. (1964)** *Professor of Management*
A.B., University of Michigan; M.B.A., University of Southern California; Ph.D., Columbia University; J.D., Western State University.
- Hanan, Barry B. (1989)** *Resident Isotope Geochemist in Geological Sciences*
B.S., University of Kansas; M.S., Ph.D., Virginia Polytechnic Institute and State University.
- Handysides, Gail (1985, except F'91-S'92)** *Lecturer in Nursing*
B.S., Andrews University; M.S., Boston University; M.A., San Diego State University.
- Hanscom, Zac, III (1978)** *Interim Associate Dean, Graduate Division; Associate Professor of Biology*
B.S., M.S., California State Polytechnic University; Ph.D., University of California, Riverside.
- Hanten, Teresa A. (1979)** *Director, Student Resource Center*
B.A., M.Ed., University of San Diego.
- Harbert, Anita S. (1979)** *Professor of Social Work*
A.B., Fairmont State College; M.S.W., West Virginia University; Ph.D., Brandeis University.
- Harkanyi, Katalin (1969)** *Librarian*
A.B., Wayne State University; M.L.S., Western Michigan University.
- Harley, Bruce L. (1990)** *Associate Librarian*
B.A., Pennsylvania State University; M.A., State University of New York at Binghamton; M.L.S., San Jose State University.
- harris, fredric j. (1968)** *Professor of Electrical and Computer Engineering*
B.E.E., Polytechnic Institute of Brooklyn; M.S.E.E., San Diego State University. Registered Professional Engineer.
- Harris, Greg L. (1989)** *Associate Professor of Biology*
B.A., Case Western Reserve University; Ph.D., University of North Carolina.
- Harris, Jay H. (1980)** *Professor of Electrical and Computer Engineering*
B.E.E., Polytechnic Institute of Brooklyn; M.S., California Institute of Technology; Ph.D., University of California, Los Angeles.
- Harris, Olita D. (1979)** *Associate Dean, College of Health and Human Services; Associate Professor of Social Work*
B.S., Rocky Mountain College; M.S.W., Ph.D., University of Denver.
- Harrison, Patrick J. (1970)** *Professor of Educational Technology*
B.S., M.S., Stout State University; Ph.D., Michigan State University.
- Hartung, Barbara W. (1976)** *Executive Assistant to the President; Professor of Communication*
A.B., M.S., San Diego State University; Ph.D., United States International University.
- Harvey, Anne-Charlotte (1984)** *Professor of Theatre*
B.A., Scripps College; B.A., University of Stockholm, Sweden; M.A., Ph.D., University of Minnesota.

- Harvey, Michael L. (1969)** *Professor of Theatre*
B.S., Harvey Mudd College; M.A., University of California, Los Angeles; Ph.D., University of Minnesota.
- Hatch, Richard A. (1975)** *Professor of Information and Decision Systems*
B.S., Boston University; Ph.D., University of Illinois.
- Hatrup, Keith (1995)** *Associate Professor of Psychology*
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- Hayakawa, Joanne (1982)** *Professor of Art*
B.A., University of California, Santa Barbara; M.F.A., University of Washington.
- Hayes, Charlotte E. (1972)** *Counselor*
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- Heck, Edward V. (1983)** *Professor of Political Science*
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- Heinen, Janet R. (1980)** *Professor of Nursing*
B.S., San Diego State University; M.S., Washington University; Ph.D., University of Denver.
- Helenurm, Kaius (1991)** *Assistant Professor of Biology*
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- Hellweg, Susan A. (1979)** *Professor of Communication*
A.B., University of California, Los Angeles; M.A., California State University, Dominguez Hills; Ph.D., University of Southern California.
- Hemmingsen, Barbara B. (1973)** *Professor of Biology*
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- Hempel, Graham (1979)** *Associate Professor of Dance*
A.B., M.A., San Francisco State University.
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- Jiracek, George R. (1980)** *Professor of Geological Sciences*
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- Krekorian, Neil (1970)** *Professor of Biology*
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- Krisans, Skaidrite (1969)** *Professor of Biology*
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- Kroncke, Patricia (1992)** *Associate Director for Operations and Conferences, Housing and Residential Life*
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- Mahaffy, Joseph M. (1985)** *Professor of Mathematical and Computer Sciences*
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- Mansfield, Robert A. (1976)** *Associate Professor of Art*
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- Marino, Kenneth E. (1986)** *Associate Dean and Director of Graduate Program, College of Business Administration; Professor of Management*
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- Marino, Leonard R. (1973)** *Professor of Electrical and Computer Engineering*
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B.S.N., M.A., M.S.N., San Diego State University.
- McClenaghan, Leroy R., Jr. (1977)** *Professor of Biology*
B.S., Colorado State University; Ph.D., University of Kansas.
- McCordick, Sharon M. (1969)** *Associate Professor of Psychology*
A.B., M.A., Ph.D., University of Colorado.
- McCormack, Alan (1987)** *Professor of Teacher Education*
B.S., SUNY College at New Paltz; M.A., Harvard University; Ed.D., University of Northern Colorado.
- McDean, Harry C. (1971)** *Professor of History*
A.B., M.A., Ph.D., University of California, Los Angeles.
- McDonald, Hugh E. (1997)** *Assistant Professor of Psychology*
B.A., University of California, Irvine; Ph.D., Indiana University.
- McDonald, Nan L. (1985)** *Assistant Professor of Music*
A.B., M.A., San Diego State University.
- McFarlane, Fred R. (1972)** *Professor of Administration, Rehabilitation and Postsecondary Education*
B.S., M.S., Stout State University; Ph.D., University of Georgia.
- McGovern, Robert F. (1991)** *Professor of Psychology*
B.S., M.A., Ph.D., Ohio State University.
- McGrath, Thomas (1990)** *M.D., Student Health Services*
B.A., San Diego State University; M.D., University of California, Irvine.
- McGuire, Kathleen L. (1990)** *Associate Professor of Biology*
B.S., University of New Mexico; Ph.D., University of Texas.
- McKenzie, Thomas L. (1980)** *Professor of Exercise and Nutritional Sciences*
B.P.E., B.E.D., University of New Brunswick; M.S.C., Dalhousie University; Ph.D., Ohio State University.
- McKerrow, Margaret (1971)** *Professor of Theatre*
A.B., Lake Erie College; M.A., Northwestern University; Ph.D., University of Michigan.
- McLeod, Douglas B. (1972)** *Professor of Mathematical and Computer Sciences*
A.B., University of North Dakota; M.A., Ph.D., University of Wisconsin.
- McPhail, Martha E. (1988)** *Associate Librarian*
B.A., M.S.L.S., University of North Carolina, Chapel Hill; M.A., San Diego State University.
- Meador, Thomas C. (1966)** *Associate Professor of Communication*
A.B., M.A., Michigan State University.
- Meadows, Eddie S. (1972)** *Professor of Music*
B.S., Tennessee State University; M.S., University of Illinois; Ph.D., Michigan State University.
- Mechikoff, Robert A. (1981)** *Professor of Exercise and Nutritional Sciences*
B.A., M.A., California State University, Long Beach; Ph.D., Ohio State University.
- Medeiros, Frank A. (1977, except F'96-S'98)** *Professor of Education, Imperial Valley Campus*
A.B., M.A., San Francisco State University; Ph.D., Stanford University.
- Mellors, Robert J. (1997)** *Resident Computer Geoscientist in Geological Sciences*
B.S., Ohio State University; M.S., Cornell University; Ph.D., Indiana University.
- Mendoza, Theresa M. (1998)** *Vice President for University Advancement*
B.A., George Washington University; M.A., Arizona State University.
- Merino, Alfred (1974)** *Associate Dean, Imperial Valley Campus; Professor of Administration, Rehabilitation and Postsecondary Education*
B.S., M.S., Western New Mexico University; Ed.D., University of Massachusetts.
- Merritt, Susan C. (1986)** *Associate Professor of Art*
B.A., Queens College; M.A., Kunstgewerbeschule-Basel, Switzerland.
- Metzger, Robert P. (1968)** *Professor of Chemistry*
B.S., University of California, Los Angeles; M.S., San Diego State University; Ph.D., San Diego State University and University of California, San Diego.
- Militka, Kathleen F. (1974)** *Professor of Teacher Education*
A.B., Arizona State University; M.S., Kansas State University; Ph.D., Boston College.
- Miller, Allan W. (1963)** *Professor of Art*
A.B., M.F.A., University of California, Los Angeles.
- Miller, Richard H. (1977)** *Professor of Geological Sciences*
B.S., San Fernando Valley State College; M.S., Ph.D., University of California, Los Angeles.

- Mitchell, Danlee G. (1964)** *Professor of Music*
B.S., M.S., University of Illinois.
- Moffatt, Ron (1984)** *Director, International Student Services*
B.A., University of North Carolina, Chapel Hill; M.Ed., University of Delaware, Newark.
- Mollenauer, Sandra O. (1970)** *Professor of Psychology*
A.B., Chatham College; Ph.D., State University of New York at Buffalo.
- Moore, Mary Jane (1972)** *Associate Professor of Anthropology*
A.B., Agnes Scott College; B.S., University of Tennessee; Ph.D., University of Wisconsin, Madison.
- Moore, Robert (1968)** *Professor of Exercise and Nutritional Sciences*
B.S., M.S., University of Illinois at Urbana-Champaign; Ph.D., University of Oregon.
- Mora, Jill K. (1994)** *Assistant Professor of Teacher Education*
B.A., Sam Houston State University; M.A., Ed.D., University of Houston.
- Moramarcio, Fred S. (1969)** *Professor of English*
A.B., Long Island University; M.A., Ph.D., University of Utah.
- Morey, Ann I. (1985)** *Professor of Administration, Rehabilitation and Postsecondary Education*
B.A., M.Ed., Pennsylvania State University; Ph.D., University of California, Berkeley.
- Morris, Richard H. (1957)** *Professor of Physics*
A.B., Ph.D., University of California, Berkeley.
- Morris, Rita I. (1990)** *Associate Professor of Nursing*
B.Sc., The Madras University, India; M.Sc., The Catholic University of America; Ph.D., The American University.
- Morton, W. Edward (1975)** *Counselor*
A.B., Westmount College; M.A., California State University, Fullerton; Ed.D., University of Mississippi.
- Moss, Susan (1998)** *Director of Diversity and Equity*
B.A., Lewis and Clark College; J.D., The American University; Ph.D., University of Wisconsin-Madison.
- Mueller, Barbara (1987)** *Professor of Communication*
B.A., M.A., Ph.D., University of Washington.
- Muroi, Linda S. (1985)** *Librarian*
B.A., M.L.S., University of Illinois at Urbana-Champaign.
- Murphy, Claire (1984)** *Professor of Psychology*
B.S., Loyola University; M.S., Ph.D., University of Massachusetts.
- Murphy, Dana W. (1980)** *Lecturer in Political Science, Imperial Valley Campus*
A.B., M.P.A., Harvard University; Ph.D., University of Washington.
- Nagel, Anne L. (1971, except F71-F73)** *Lecturer in Teacher Education*
B.A., Willamette University; M.Ed., University of Oregon; Ph.D., University of Wisconsin, Madison.
- Nakamura, Kotaro (1980)** *Assistant Professor of Art*
B.E., Kanto-Gakuin University, Yokohama, Japan; M.A., San Diego State University.
- Narang, Balbir S. (1968)** *Professor of Aerospace Engineering and Engineering Mechanics*
B.S., M.S., Ph.D., University of Illinois.
- Nelson, Elisabeth S. (1995)** *Assistant Professor of Geography*
B.S., M.S., Ph.D., University of South Carolina.
- Nelson, Kerry A. (1988)** *Associate Professor of Art*
B.A., University of Delaware; M.S., Drexel University.
- Nelson, Thomas A. (1968)** *Professor of English*
A.B., Oklahoma University; M.A., Wichita State University; Ph.D., Tulane University.
- Nericcio, William A. (1991)** *Associate Professor of English and Comparative Literature*
B.A., University of Texas at Austin; M.A., Ph.D., Cornell University.
- Neuber, Frank (1976)** *Career Counselor*
A.B., M.P.A., San Diego State University.
- Neumann, Richard (1991)** *Associate Professor of Education, Imperial Valley Campus*
B.S., Central Connecticut State University; M.A., Ph.D., University of Colorado, Boulder.
- Nichols, Alan C. (1964)** *Professor of Communicative Disorders*
B.S., Bowling Green State University; M.A., Ph.D., Ohio State University.
- Nichols-Bernhard, Jeanne F. (1985)** *Professor of Exercise and Nutritional Sciences*
B.S., Northeastern University; M.S., University of New Hampshire; Ph.D., University of Michigan.
- Nieto, Jesus (1989)** *Associate Professor of Teacher Education*
B.A., Wayne State University; M.S., San Diego State University; Ph.D., San Diego State University and Claremont Graduate School.
- Ning, Qiang (1997)** *Assistant Professor of Art*
B.A., Sichuan University; M.A., Ph.D., Harvard University.
- Norman, Ronald J. (1985)** *Professor of Information and Decision Systems*
B.S., California State University, Los Angeles; M.S., West Coast University; Ph.D., University of Arizona.
- Nosseir, Nagy (1983)** *Professor of Aerospace Engineering and Engineering Mechanics*
B.S., Cairo University; M.A., University of Toronto; Ph.D., University of Southern California.
- Noto, James V. (1969)** *Associate Professor of Public Health*
B.S., Slippery Rock State College; M.S., H.S.D., Indiana University.
- Nowak, Daniel B. (1973)** *Vice President for Student Affairs*
B.S., M.A., East Michigan University; Ed.D., University of California, Los Angeles.
- Nunn, Melissa (1979)** *Associate Professor of Dance*
A.B., University of California, Los Angeles; M.A., Northwestern University.
- Oades, Rizalino A. (1969)** *Associate Professor of History*
A.B., Far Eastern University, Philippines; M.A., University of Hong Kong; Ph.D., University of Hawaii.
- O'Brien, Albert C. (1965)** *Professor of History*
A.B., Providence College; A.M.T., Harvard University; Ph.D., University of Notre Dame.
- O'Brien, Mary E. (1966)** *Associate Professor of Spanish*
B.S., North Dakota State University; M.A., Ph.D., University of Colorado.
- Ochoa, Alberto M. (1975)** *Professor of Policy Studies in Language and Cross-Cultural Education*
B.A., California State University, Los Angeles; M.S., University of Southern California; Ed.D., University of Massachusetts.
- O'Donnell, Terry L. (1975)** *Professor of Music and Theatre*
A.B., M.A., San Diego State University; D.M.A., University of Arizona.
- Oechel, Walter C. (1978)** *Professor of Biology*
A.B., San Diego State University; Ph.D., University of California, Riverside.
- Oestreich, Nathan A. (1985)** *Professor of Accountancy*
B.A., Texas Lutheran College; M.S., Ph.D., University of Houston.
- O'Leary, John F. (1985)** *Professor of Geography*
A.B., University of California, Riverside; M.A., Ph.D., University of California, Los Angeles.
- Olevsky, Eugene A. (1998)** *Assistant Professor of Mechanical Engineering*
B.S., M.S., Kiev Institute of Technology, Ukraine; B.S., M.S., University of Kiev, Ukraine; Ph.D., National Academy of Sciences, Ukraine.
- Olson, Lois B. (1994)** *Lecturer in Marketing*
B.A., Albright College; M.S., Cornell University; M.B.A., Boston College; D.B.A., United States International University.
- Omberg, Edward (1989)** *Professor of Finance*
B.S., University of Santa Clara; M.B.A., Ph.D., University of California, Los Angeles.
- Ornatowski, Cezar M. (1992)** *Associate Professor of Rhetoric and Writing Studies*
B.A., Mickiewicz University; M.A., Boston College; Ph.D., University of California, San Diego.
- Orth, Fredrick J. (1965)** *Professor of Art*
B.A., M.F.A., University of Washington.
- Ortiz, Isidro D. (1986)** *Professor of Chicana and Chicano Studies*
B.S., Texas A & I University; M.A., Ph.D., Stanford University.
- Ortiz, Samuel O. (1994)** *Assistant Professor of Counseling and School Psychology*
B.A., M.A., Ph.D., University of Southern California.
- Oseroff, Saul B. (1984)** *Professor of Physics*
M.S., Ph.D., Institute of Physics, University of Cuyo, Argentina.
- Ozturk, Yusuf (1998)** *Associate Professor of Electrical and Computer Engineering*
B.Sc., Middle East Technical University, Turkey; M.S., Ph.D., Ege University, Turkey.
- Pacheco, Richard (1979)** *Professor of Policy Studies in Language and Cross-Cultural Education*
B.A., M.Ed., University of Nevada, Reno; Ph.D., University of Illinois.
- Packard, Thomas R. (1983)** *Assistant Professor of Social Work*
B.A., M.S.W., San Diego State University; D.S.W., University of California, Los Angeles.
- Padmanabhan, Prasad (1995)** *Associate Professor of Finance, Imperial Valley Campus*
B.Tech., Indian Institute of Technology; M.B.A., Ph.D., McGill University.
- Palsson, Gerald D. (1976)** *Associate Librarian*
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Full-Time Faculty

- Pang, Valerie O. (1989)** *Professor of Teacher Education*
B.Ed., Seattle University; M.Ed., Central Washington University; Ph.D., University of Washington.
- Panos, Nicholas (1968)** *Assistant Dean for Student Affairs, College of Engineering; Professor of Electrical and Computer Engineering*
B.S.E.E., Columbia University; M.S.E.E., San Diego State University. Registered Professional Engineer.
- Paolini, Paul J., Jr. (1970)** *Associate Dean, College of Sciences; Professor of Biology*
B.S., M.S., Rensselaer Polytechnic Institute; Ph.D., University of California, Davis.
- Papin, Patrick J. (1985)** *Professor of Physics*
B.S., Cleveland State University; M.S., San Diego State University; Ph.D., University of California, Los Angeles.
- Park, Chong Jin (1972)** *Professor of Mathematical and Computer Sciences*
A.B., B.S., University of Washington; M.S., Kansas State University; Ph.D., University of Wisconsin.
- Park, Cynthia Darche (1977)** *Associate Professor of Teacher Education*
A.B., George Washington University; M.A., Ph.D., University of Kansas.
- Park, Jong-Min (1998)** *Assistant Professor of Electrical and Computer Engineering*
B.S., Korea University; M.S., Ph.D., University of Wisconsin-Madison.
- Parker, Linda S. (1986)** *Professor of American Indian Studies*
B.A., Oral Roberts University; M.A., Ph.D., University of Oklahoma.
- Patrick, Kevin M. (1983)** *Director, Student Health Services; Co-Director, UCSD-SDSU Preventive Medicine Residency Program*
B.A., Baylor University; M.S., University of Utah; M.D., Baylor College of Medicine.
- Patterson, Patricia (1985)** *Professor of Exercise and Nutritional Sciences*
B.S., M.S., Ph.D., University of Wisconsin.
- Pearl, Natalie (1996)** *Assistant Professor of Public Administration and Urban Studies*
B.A., University of California, Irvine; M.S.W., San Diego State University; Ph.D., Brandeis University.
- Peddecord, K. Michael (1981)** *Professor of Public Health*
B.S., M.S., Arizona State University; Dr.P.H., University of Texas Health Science Center at Houston.
- Pendleton, Wade C. (1969)** *Professor of Anthropology*
A.B., Ph.D., University of California, Berkeley.
- Penrose, John M. (1988)** *Professor of Information and Decision Systems*
B.S., M.S., Ohio University; Ph.D., University of Texas at Austin.
- Perkins, Michael J. (1986)** *Associate Librarian*
B.B.A., St. Norbert College; M.L.S., University of Wisconsin.
- Perrault, Jacques (1984)** *Professor of Biology*
B.S., McGill University; Ph.D., University of California, San Diego.
- Pershing, Jana L. (1997)** *Assistant Professor of Sociology*
B.A., Indiana University; M.A., Ph.D., University of Washington.
- Peterman, Lewis E., Jr. (1978)** *Professor of Music*
B.A., San Diego State University; M.M., Northwestern University; Ph.D., University of Cincinnati.
- Peterson, Gary L. (1963)** *Professor of Geological Sciences*
A.B., University of Colorado; M.S., Ph.D., University of Washington.
- Philipp, Randolph A. (1990)** *Associate Professor of Teacher Education*
B.A., M.S., California State University, Northridge; Ph.D., University of Wisconsin, Madison.
- Phleger, Charles F. (1971)** *Professor of Biology*
A.B., Stanford University; M.A., San Diego State University; Ph.D., University of California, San Diego.
- Pierce, Stephen J. (1984)** *Professor of Mathematical and Computer Sciences*
B.S., Stanford University; Ph.D., University of California, Santa Barbara.
- Pierucci, Mauro (1979)** *Professor of Aerospace Engineering and Engineering Mechanics*
B.S., M.S., Ph.D., Polytechnic Institute of New York.
- Piland, William E. (1987)** *Professor of Administration, Rehabilitation and Postsecondary Education*
B.S., M.S., Ed.D., Northern Illinois University.
- Pinto, John G. (1979)** *Assistant Dean for Research and Graduate Programs and Director of Doctoral Program, College of Engineering; Professor of Mechanical Engineering*
B.E., B.D.T., College of Engineering; M.A.Sc., University of Toronto; Ph.D., University of California, San Diego.
- Pischerio, Robert J. (1966)** *Professor of Physics*
B.S., M.S., Ph.D., University of Arizona.
- Plotkin, Allen (1985)** *Professor of Aerospace Engineering and Engineering Mechanics*
B.S., M.S., Columbia University; Ph.D., Stanford University.
- Plotnik, Rod (1970)** *Professor of Psychology*
A.B., St. John's College; M.S., University of Miami; Ph.D., University of Florida.
- Pohan, Cathy A. (1996)** *Assistant Professor of Teacher Education*
B.A., M.A., California State University, Fresno; Ph.D., University of Nebraska.
- Pointer, Dennis D. (1991)** *The John J. Hanlon Chair in Health Services Research and Policy; Professor of Public Health*
B.Sc., Iowa State University of Science and Technology; Ph.D., University of Iowa.
- Polich, John L. (1969)** *Associate Professor of History, Imperial Valley Campus*
B.S., Loyola University; M.S., M.A., University of Southern California; Ph.D., University of New Mexico.
- Polkinhorn, Harry (1984)** *Professor of English; Director, SDSU Press*
B.A., University of California, Berkeley; M.A. (English), M.A. (Art), San Diego State University; Ph.D., New York University.
- Ponce, Victor M. (1980)** *Professor of Civil and Environmental Engineering*
B.S., National University of Engineering, Peru; M.S., Ph.D., Colorado State University.
- Poole, Deborah (1989)** *Associate Professor of Rhetoric and Writing Studies and Linguistics*
B.A., Emory University; M.A., Ph.D., University of Southern California.
- Popp, Dean O. (1969)** *Associate Vice President for Faculty Affairs; Professor of Economics*
A.B., Willamette University; M.S., Ph.D., Purdue University.
- Potter, Gregory S. (1998)** *Assistant Professor of Military Science*
B.S., California State University, Stanislaus.
- Pozos, Robert S. (1994)** *Assistant Dean for Faculty Development, College of Sciences; Professor of Biology*
B.S., St. Mary's College; M.S., Ph.D., Southern Illinois University.
- Preston, David L. (1971)** *Professor of Sociology*
A.B., Stanford University; M.A., Ph.D., University of Illinois.
- Price, Joseph M. (1989)** *Associate Professor of Psychology*
B.A., Rockmont College; M.A., University of Colorado; Ph.D., Purdue University.
- Price, Judy M. (1972)** *Associate Professor of Psychology*
A.B., Stanford University; M.A., Ph.D., Columbia University.
- Prislin, Radmila (1996)** *Associate Professor of Psychology*
B.A., M.Sc., Ph.D., University of Zagreb.
- Pryde, Philip R. (1969)** *Professor of Geography*
A.B., Amherst College; M.A., Ph.D., University of Washington.
- Puerto, Cecilia (1994)** *Associate Librarian*
B.A., Sangamon State University; M.A., University of California, Santa Barbara; M.S., University of Illinois at Urbana-Champaign.
- Pugh, Darrell L. (1981)** *Professor of Public Administration and Urban Studies*
B.A., M.P.A., San Diego State University; Ph.D., University of Southern California.
- Pugh, S. Douglas (1997)** *Assistant Professor of Psychology*
B.A., College of William and Mary; Ph.D., Tulane University.
- Pullman, David P. (1994)** *Assistant Professor of Chemistry*
A.B., Princeton University; M.A., Ph.D., Harvard University.
- Pumpian, Ian R. (1976)** *Professor of Administration, Rehabilitation and Postsecondary Education*
B.S., M.S., Ph.D., University of Wisconsin.
- Purandare, Sanjay V. (1996)** *Assistant Professor of Military Science*
B.S., United States Military Academy.
- Quandah, Ellen (1994)** *Associate Professor of Rhetoric and Writing Studies*
B.A., Luther College; Ph.D., University of Iowa.
- Quastler, Imre E. (1967)** *Professor of Geography*
A.B., Wayne State University; M.A., Northwestern University; Ph.D., University of Kansas.
- Quinn, Rebecca A. (1971)** *Assistant Professor of Exercise and Nutritional Sciences*
B.S.E., M.S., Central Missouri State College; Ph.D., University of Iowa.
- Quintana, P.J.E. (Jenny) (1995)** *Assistant Professor of Public Health*
B.S., University of California, Davis; M.P.H., San Diego State University; Ph.D., University of California, Berkeley.
- Raafat, Feradoon (1986)** *Professor of Information and Decision Systems*
B.S., Phillips University; B.S., M.I.E., Ph.D., Oklahoma State University.

- Radlow, Robert (1968)** *Professor of Psychology*
B.S., The City University of New York; M.S., Ph.D., Pennsylvania State University.
- Rahiotis, Miguel (1984)** *Counselor, Imperial Valley Campus*
A.B., M.S., San Diego State University.
- Rapps, Jane A. (1983, except F'92-S'93)** *Assistant Professor of Nursing*
B.S.N., California State University, Fresno; M.S.Ed., University of Southern California; M.S.N., University of Maryland; D.N.Sc., University of San Diego.
- Rasmussen, Lucinda A. (1995)** *Assistant Professor of Social Work*
B.S., Brigham Young University; M.S.W., Ph.D., University of Utah.
- Rayle, David L. (1970)** *Professor of Biology*
A.B., Ph.D., University of California, Santa Barbara.
- Rea, Louis M. (1975)** *Professor of Public Administration and Urban Studies*
A.B., Colgate University; M.R.P., Ph.D., Syracuse University.
- Real, Michael R. (1980)** *Professor of Communication*
A.B., St. Paul Seminary; M.A., College of St. Thomas; Ph.D., University of Illinois.
- Reed, Richard C. (1984)** *Associate Professor of Nursing*
B.A., Kent State University; B.S.N., Mt. St. Mary College; M.Ed., Columbia University; Ed.D., University of Tulsa.
- Reed, Stephen K. (1988)** *Professor of Psychology*
B.A., University of Wisconsin; Ph.D., University of California, Los Angeles.
- Reeder, Tod W. (1996)** *Assistant Professor of Biology*
B.S., Emporia State University; M.S., University of Missouri, Kansas City; Ph.D., University of Texas at Austin.
- Reh fuss, Donald E. (1962)** *Professor of Physics*
A.B., Reed College; M.A., Ph.D., University of Oregon.
- Reid, William N. (1983)** *Associate Professor of Theatre*
B.S., West Texas State University; M.A., University of Arizona; M.F.A., California State University, Long Beach.
- Reilly, Judy S. (1986)** *Professor of Psychology*
A.B., M.A., Ph.D., University of California, Los Angeles.
- Reinholz, Randy (1997)** *Assistant Professor of Theatre*
B.A., William Jewell College; M.F.A., Cornell University.
- Reppart, Thomas A. (1998)** *Assistant Professor of Aerospace Studies*
B.A., Boise State University; M.A., Embry-Riddle Aeronautical University.
- Rey, Sergio J., Jr. (1992)** *Associate Professor of Geography*
B.S., Stockton State College; M.A., Ph.D., University of California, Santa Barbara.
- Reyes, Rogelio (1986)** *Professor of Linguistics, Imperial Valley Campus*
B.A., Mexico City College; Ph.D., Harvard University.
- Rhyn e, Lawrence C. (1987)** *Associate Professor of Management*
B.S., M.B.A., University of Missouri; Ph.D., Northwestern University.
- Riegel, Barbara Jean (1984, except F'87-S'95)** *Professor of Nursing*
B.S.N., San Diego State University; M.S.N., D.N.Sc., University of California, Los Angeles.
- Rigby, Ida K. (1976)** *Professor of Art*
B.A., M.A., Stanford University; M.A., Ph.D., University of California, Berkeley.
- Riley, Edward P. (1988)** *Professor of Psychology*
B.A., Rutgers University; M.Sc., Ph.D., Tulane University.
- Ritblatt, Shulamit N. (1994)** *Assistant Professor of Child and Family Development*
B.A., M.A., Tel-Aviv University, Israel; Ph.D., Florida State University.
- Ritchie, Donn C. (1990)** *Associate Professor of Educational Technology*
B.S., University of Akron; M.S., University of Wyoming; Ph.D., Utah State University.
- Rivera-Garza, Cristina (1997)** *Assistant Professor of History*
B.A., National Autonomous University of Mexico; M.A., Ph.D., University of Houston.
- Robasciotti, Carole A. (1980)** *Assistant Dean for Student Affairs, College of Professional Studies and Fine Arts; Lecturer in Exercise and Nutritional Sciences*
B.S., University of West Florida; M.S., Kansas State University.
- Robbins, Christiane (1997)** *Assistant Professor of Communication*
B.A., M.A., University of Wisconsin; M.F.A., California Institute of the Arts.
- Roberts, Arthur R. (1997)** *Professor of Military Science*
B.A., University of Mississippi; M.A., University of Louisville.
- Roberts, Lissa (1989)** *Associate Professor of History*
B.A., University of Washington; M.A., Ph.D., University of California, Los Angeles.
- Roberts, Michael J. (1998)** *Assistant Professor of Naval Science*
B.A., University of Maine.
- Roberts-Fields, Gail C. (1976)** *Professor of Art*
B.F.A., M.A., University of New Mexico.
- Robertson, David C. (1986)** *Associate Director, Student Resource Center*
A.B., M.S., San Diego State University.
- Robinett, E. Jane (1993)** *Associate Professor of English and Comparative Literature and Rhetoric and Writing Studies*
B.A., Goshen College; M.A., Ph.D., University of Notre Dame.
- Robinson, Gail L. (1989)** *Professor of Spanish and Linguistics*
B.A., Boston University; M.A., University of Hawaii; Ph.D., Stanford University.
- Robinson-Zañartu, Carol A. (1980)** *Professor of Counseling and School Psychology*
A.B., West Virginia Wesleyan College; M.Ed., Boston University; Ph.D., University of Pittsburgh.
- Rockwell, Thomas K. (1983)** *Professor of Geological Sciences*
B.S., University of Nevada; Ph.D., University of California, Santa Barbara.
- Rodin, Miriam J. (1966)** *Professor of Psychology*
A.B., M.A., Ph.D., University of California, Los Angeles.
- Rodriguez, James L. (1997)** *Assistant Professor of Teacher Education*
B.A., Pomona College; Ph.D., Stanford University.
- Rodriguez, José D. (1977)** *Professor of Chicana and Chicano Studies*
A.B., San Diego State University; Ph.D., University of California, San Diego.
- Roeder, Stephen B.W. (1968)** *Professor of Physics and Chemistry*
A.B., Dartmouth College; Ph.D., University of Wisconsin.
- Rogers, Gloria H. (1985)** *Associate Librarian*
B.A., National Taiwan University; M.L.S., University of California, Berkeley; M.A., San Diego State University.
- Rogers, William N., II (1968)** *Professor of English and Comparative Literature*
A.B., Stanford University; M.A., Ph.D., University of California, Berkeley.
- Rohr, Vivian J. (1965)** *Professor of Anthropology*
A.B., M.A., University of Chicago; Ph.D., University of Minnesota.
- Rojas, Gonzalo G. (1976)** *Director, Student Outreach Services*
B.A., University of California, Los Angeles; M.S., San Diego State University.
- Root, William A. (1998)** *Staff Scientist in Mathematical and Computer Sciences*
B.A., M.S., San Diego State University.
- Rosenstein, Leon (1969)** *Professor of Philosophy*
A.B., Ph.D., Columbia University.
- Ross, Donna L. (1998)** *Assistant Professor of Teacher Education*
B.A., Lewis and Clark College; M.S., San Diego State University; Ph.D., University of Washington.
- Ross, James E. (1969)** *Professor of Mathematical and Computer Sciences*
B.M., Ph.D., University of Minnesota.
- Ross, John B. (1995)** *Director of Information Systems and Technology, Library*
B.A., Albertson College of Idaho; M.L.S., Emory University.
- Ross, Kathleen H. (1968)** *Director, Scholarship Office*
A.B., M.S., San Diego State University.
- Ross, Pamela J. (1977)** *Professor of Teacher Education*
B.A., Lake Erie College; M.A., M.S., Ph.D., University of Pennsylvania.
- Rossett, Allison (1977)** *Professor of Educational Technology*
A.B., Beaver College; Ed.D., University of Massachusetts at Amherst.
- Rother, James (1969)** *Professor of English and Comparative Literature*
A.B., M.A., McGill University; Ph.D., University of California, Santa Barbara.
- Roush, Sally F. (1982)** *Vice President for Business and Financial Affairs*
B.A., University of Denver.
- Rushall, Brent S. (1985)** *Professor of Exercise and Nutritional Sciences*
B.A., Sydney University; M.S., Ph.D., Indiana University.
- Ryan, Richard W. (1982)** *Professor of Public Administration and Urban Studies, Imperial Valley Campus*
B.A., The Citadel, Charleston, South Carolina; M.P.A., California State University, Hayward; Ph.D., University of Southern California.
- Saarmann, Lembi (1986)** *Associate Professor of Nursing*
B.S.N., M.S.N., Adelphi University; Ed.D., Teachers College, Columbia University.
- Saba, Farhad (1984)** *Professor of Educational Technology*
B.A., M.A., San Francisco State University; Ph.D., Syracuse University.
- Sabath, Michael J. (1993)** *Associate Professor of Public Administration and Urban Studies, Imperial Valley Campus*
B.S., University of California, Berkeley; M.P.A., California State University, Chico; Ph.D., University of Pittsburgh.

Full-Time Faculty

- Sabbadini, Roger A. (1977)** *Professor of Biology*
A.B., Ph.D., University of California, Davis.
- Saccuzzo, Dennis P. (1975)** *Professor of Psychology*
A.B., Sonoma State University; M.A., Ph.D., Kent State University; J.D., California Western School of Law.
- Sachdeva, Kanwal S. (1976)** *Associate Professor of Finance*
B.Com., Delhi University; M.B.A., D.B.A., Indiana University.
- Saghafi, Massoud M. (1987)** *Professor of Marketing*
B.A., National University of Iran; M.A., Ph.D., University of Southern California.
- Salamon, Peter (1980)** *Professor of Mathematical and Computer Sciences*
A.B., Lindenwood College; M.S., Drexel University; Ph.D., University of Chicago.
- Salehizadeh, Mehdi (1980)** *Professor of Finance*
B.S., M.B.A., Ph.D., University of Wisconsin.
- Sallis, James F., Jr. (1983)** *Professor of Psychology*
B.S., Belhaven College; M.S., Ph.D., Memphis State University.
- Salzer, Beeb (1982)** *Professor of Theatre*
B.A., M.F.A., Yale University.
- Samimi, Behzad S. (1984)** *Professor of Public Health*
B.S., M.S.P.H., Teheran University; M.S.P.H., Ph.D., Tulane University. Certified Industrial Hygienist.
- Samovar, Larry A. (1963)** *Professor of Communication*
A.B., California State University, Los Angeles; M.S., Ph.D., Purdue University.
- Samraj, Betty T.R. (1997)** *Assistant Professor of Linguistics*
B.A., M.A., National University of Singapore; Ph.D., University of Michigan.
- Samuelson, Richard A. (1973)** *Professor of Accountancy*
B.S., Northwestern University; M.B.A., University of Chicago; Ph.D., University of California, Los Angeles. Certified Public Accountant.
- Sandback, Patricia R. (1974)** *Professor of Dance*
B.S., University of Minnesota; M.A., San Diego State University; M.F.A., University of California, Irvine.
- Santa Cruz, Rafaela M. (1980)** *Associate Professor of Teacher Education*
B.S., M.S., University of Southern California; Ph.D., University of Arizona.
- Savvas, Minas (1968)** *Professor of English and Comparative Literature*
A.B., M.A., University of Illinois; Ph.D., University of California, Santa Barbara.
- Scheck, Dennis C. (1968)** *Professor of Sociology*
A.B., MacMurray College; M.S., Ph.D., Purdue University.
- Scheidel, Mary (1977)** *Test Officer*
B.S., Pennsylvania State University; M.S., San Diego State University.
- Schorr, James L. (1983)** *Professor of French*
B.A., M.A., Ph.D., University of Texas at Austin.
- Schreiber, Loren P. (1994)** *Associate Professor of Theatre*
B.A., M.A., Louisiana State University; M.F.A., San Diego State University.
- Schulte, Richard H. (1965)** *Professor of Psychology*
A.B., Michigan State University; M.A., Ph.D., University of Illinois.
- Schultze, William A. (1968)** *Professor of Political Science*
A.B., Nebraska Wesleyan University; M.A., Ph.D., Rutgers University.
- Sciglimpaglia, Donald (1977)** *Professor of Marketing*
B.S.I.E., University of Florida; M.S., University of West Florida; D.B.A., University of Colorado, Boulder.
- Scollay, Patricia A. (1972)** *Associate Professor of Psychology*
A.B., University of California, Berkeley; M.A., Ph.D., University of California, Davis.
- Scott, Carole A. (1969)** *Dean, Undergraduate Studies; Associate Professor of English*
A.B., M.A., McGill University; Ph.D., University of California, Santa Barbara.
- Segade, Gustavo V. (1967)** *Professor of Spanish*
A.B., M.A., Ph.D., University of Arizona.
- Segall, Anca Mara (1994)** *Assistant Professor of Biology*
B.S., University of Maryland; Ph.D., University of Utah.
- Seidman, Robert L. (1981)** *Associate Professor of Public Health*
A.B., San Diego State University; M.A., Ph.D., Johns Hopkins University.
- Seitz, Michael R. (1985)** *Professor of Communicative Disorders*
B.A., M.A., Ph.D., University of Washington.
- Selder, Dennis J. (1968)** *Professor of Exercise and Nutritional Sciences*
B.P.E., M.P.E., University of British Columbia; Ph.D., Ohio State University.
- Semlak, Sarah M. (1994)** *Lecturer in Child and Family Development*
B.A., University of California, San Diego; Ph.D., University of California, Berkeley.
- Senn, Karen L. (1977)** *Professor of Public Health*
A.B., Marygrove College; Ed.D., Temple University; M.P.H., University of Minnesota.
- Senour, Maria Nieto (1977)** *Professor of Counseling and School Psychology*
A.B., Mangrove College; M.Ed., University of Toledo; Ph.D., Wayne State University.
- Shackelford, Gordon L. (1975)** *Lecturer in Physics*
B.S., M.S., San Diego State University.
- Shafter, Allen W. (1989)** *Professor of Astronomy*
B.A., University of California, Irvine; M.A., Ph.D., University of California, Los Angeles.
- Shapiro, Lewis P. (1995)** *Associate Professor of Communicative Disorders*
B.A., University of Florida; M.A., Memphis State University; Ph.D., Brandeis University.
- Shapovalov, Veronica (1988)** *Associate Professor of Russian Diploma*
Leningrad State University; M.A., Sangamon State University; Ph.D., University of Illinois at Urbana-Champaign.
- Sharabi, M. Nazmi (1981)** *Associate Professor of Civil and Environmental Engineering*
B.S., University of Damascus; M.S., University of Minnesota; Ph.D., University of Texas.
- Sharpe, David M. (1977)** *Director, Instructional Technology Services*
A.B., M.A., San Diego State University; Ed.D., Indiana University.
- Shaw, Larry J. (1968)** *Professor of Teacher Education*
A.B., Sioux Falls College; M.Ed., Ed.D., University of Nebraska.
- Sheposh, John P. (1968)** *Professor of Psychology*
A.B., M.A., Ph.D., Wayne State University.
- Sheres, Ita G. (1971)** *Professor of English and Comparative Literature*
A.B., Hebrew University; M.A., Ph.D., University of Wisconsin.
- Sherr, Steven D. (1969)** *Counselor*
A.B., City College of New York; M.A., Temple University; Ph.D., University of Missouri.
- Sherrard, William R. (1968)** *Professor of Information and Decision Systems*
A.B., M.B.A., Ph.D., University of Washington.
- Shillington, Audrey M. (1997)** *Assistant Professor of Social Work*
B.A., Drury College; M.S.W., M.P.E., Ph.D., Washington University.
- Shirk, Helen Z. (1976)** *Professor of Art*
B.S., Skidmore College; M.F.A., Indiana University.
- Shively, Martha J. (1978)** *Professor of Nursing*
B.S.N., University of Maryland; M.A., University of Washington; Ph.D., University of Texas at Austin.
- Shojai, Donald A. (1971)** *Professor of English and Comparative Literature*
A.B., Harvard University; M.A., Ph.D., University of Michigan.
- Shore, Herbert B. (1975)** *Professor of Physics*
B.S., Massachusetts Institute of Technology; Ph.D., University of California, Berkeley.
- Short, Donald R., Jr. (1969)** *Professor of Mathematical and Computer Sciences*
A.B., University of California, Los Angeles; Ph.D., Oregon State University.
- Short, James L. (1973)** *Professor of Finance*
B.S., M.S., Ph.D., University of California, Los Angeles.
- Shumaker, Jeanette (1992)** *Assistant Dean for Student Affairs, Imperial Valley Campus; Associate Professor of English, Imperial Valley Campus*
B.A., University of Redlands; M.A., Ph.D., Claremont Graduate School.
- Silverman, Malcolm N. (1975)** *Professor of Spanish and Portuguese*
A.B., The City University of New York; M.A., Ph.D., University of Illinois.
- Siman, Alan E. (1974)** *Associate Professor of Social Work*
A.B., Franklin and Marshall College; M.S.S., Ph.D., Bryn Mawr College.
- Simas, Rick A. (1992)** *Assistant Professor of Theatre*
B.A., San Francisco State University; M.A., University of California, Los Angeles; Ph.D., University of California, Berkeley.
- Simmons, Roger (1976)** *Professor of Exercise and Nutritional Sciences*
M.S., University of Wyoming; Ph.D., University of Iowa.
- Simpson, Michael G. (1986)** *Professor of Biology*
B.S., University of Florida; M.S., University of North Carolina; Ph.D., Duke University.
- Singer, Ethan A. (1979)** *Associate Vice President for Academic Affairs; Professor of Business Administration*
A.B., University of Connecticut; M.P.A., Ph.D., University of Southern California.
- Singh, Rahul (1998)** *Assistant Professor of Electrical and Computer Engineering*
B.S.E.E., Purdue University; M.S.E.E., University of Illinois at Urbana-Champaign; Ph.D., University of California, San Diego.

- Singleton, Jerry B. (1996)** *Professor of Naval Science*
B.S., State University of New York; M.A., Naval War College; M.S., Salve Regina College.
- Sinha, Kimberly (1998)** *Director, Institutional Research*
B.A., University of Pittsburgh at Johnstown; M.A., Ph.D., Bowling Green State University.
- Siprut, Mark J. (1989)** *Assistant Professor of Art*
B.A., M.A., Humboldt State University; M.F.A., University of California, Santa Barbara.
- Skwara, Erich W. (1986)** *Professor of Humanities and German*
B.A., University of Linz; M.A., University of Salzburg; Ph.D., State University of New York at Albany.
- Slymen, Donald J. (1988)** *Professor of Public Health*
A.B., University of California, Berkeley; M.S., University of California, Los Angeles; Ph.D., University of Iowa.
- Smith, Annette R. (1985, except F'85-S'87)** *Lecturer in Social Work*
B.A., Barnard College; M.A., University of California, San Diego; M.S.W., University of California, Berkeley.
- Smith, Diane K. (1990)** *Associate Professor of Chemistry*
B.S., Lewis and Clark College; Ph.D., Massachusetts Institute of Technology.
- Smith, Jane K. (1968, except 1970)** *Assistant Vice President for Academic Services*
B.S., West Virginia University; M.A., Northwestern University; Ph.D., University of Southern California.
- Smith, Joseph A. (1997)** *Lecturer in Classics*
B.A., University of Rochester; M.A., University of California, Berkeley; Ph.D., University of Southern California.
- Snyder, Willard S., Jr. (1984, except S'85)** *Lecturer in Accountancy*
B.S., M.B.A., University of Southern California.
- Sondak, Norman E. (1978)** *Professor of Information and Decision Systems*
B.S., C.C.N.Y.; M.S., Northwestern University; D.Eng., Yale University.
- Sonek, Alexander, Jr. (1968)** *Assistant Professor of Anthropology*
A.B., City College of New York; M.A., Ph.D., University of Oregon.
- Song, Moon H. (1988)** *Associate Professor of Finance*
B.B.A., Seoul National University; M.A., Ph.D., Ohio State University.
- Soule, John W. (1970)** *Professor of Political Science*
A.B., M.A., Michigan State University; Ph.D., University of Kentucky.
- Sowder, Judith T. (1986)** *Professor of Mathematical and Computer Sciences*
B.A., Seattle University; M.S., University of Notre Dame; Ph.D., University of Oregon.
- Sowder, Larry K. (1986)** *Professor of Mathematical and Computer Sciences*
B.S., M.A.T., Indiana University; Ph.D., University of Wisconsin.
- Sparks, Irving Alan (1974)** *Professor of Religious Studies*
A.B., Davidson College; B.D., Union Theological Seminary in Virginia; S.T.M., Lancaster Theological Seminary; Ph.D., Claremont Graduate School.
- Sparrow, Glen W. (1980)** *Professor of Public Administration and Urban Studies*
A.B., M.A., San Jose State University; Ph.D., Claremont Graduate School.
- Spevak, Joseph E. (1969)** *Assistant Professor of Communication*
B.S., Kent State University; M.S., Boston University; Ph.D., University of Iowa.
- Spindler, Audrey A. (1977)** *Professor of Exercise and Nutritional Sciences*
B.S., George Washington University; M.S., Ph.D., Colorado State University.
- Spinetta, John J. (1972)** *Professor of Psychology*
A.B., M.A., Gonzaga University; Ph.D., University of Southern California.
- Spitzberg, Brian H. (1989)** *Professor of Communication*
B.A., University of Texas at Arlington; M.A., Ph.D., University of Southern California.
- Sprague, Robert W., Jr. (1996)** *Assistant Professor of Naval Science*
B.A., Manhattanville College; J.D., Villanova University.
- Springer, Arthur (1968)** *Associate Professor of Mathematical and Computer Sciences*
B.S., Illinois Institute of Technology; Ph.D., University of California, Berkeley.
- Sprotte, Nancy C. (1981)** *Assistant Vice President for Student Affairs*
B.A., M.S., San Jose State University; M.P.A., D.P.A., University of Southern California.
- Stampf, Barry G. (1982)** *Associate Professor of English, Imperial Valley Campus*
B.A., Yale University; M.A., University of New Mexico; Ph.D., University of California, Santa Barbara.
- Stampf, Ronald W. (1988)** *Professor of Marketing*
B.B.A., M.B.A., University of Wisconsin, Milwaukee; Ph.D. University of Wisconsin, Madison.
- Stanford, E. Percil (1973)** *Professor of Social Work*
A.B., Morgan State College; M.S., Ph.D., Iowa State University.
- Starr, Raymond G. (1964)** *Professor of History*
A.B., Ph.D., University of Texas.
- Stauffer, Thomas David (1984)** *Professor of Music*
B.A., University of California, Riverside; M.M., Music Academy of Zagreb, Zagreb, Yugoslavia; M.A., University of California, Davis.
- Steffey, Duane L. (1988)** *Associate Professor of Mathematical and Computer Sciences*
B.S., M.S., Ph.D., Carnegie-Mellon University.
- Sterk, William E. (1978)** *Professor of Finance*
B.S.E., University of Michigan; M.B.A., Ph.D., University of Wisconsin.
- Stewart, Douglas B. (1971)** *Professor of Economics*
B.S., University of Portland; M.S., Ph.D., University of Oregon.
- Stewart, Kris (1984)** *Associate Professor of Mathematical and Computer Sciences*
B.A., University of California, San Diego; M.S., San Diego State University; Ph.D., University of New Mexico.
- Stites, Francis N. (1968)** *Professor of History*
A.B., Marian College; M.A., Ph.D., Indiana University.
- Stock, Robert L. (1975)** *Associate Professor of Public Administration and Urban Studies*
A.B., M.P.A., Ph.D., University of Pittsburgh.
- Stow, Douglas A. (1983)** *Professor of Geography*
B.A., M.A., Ph.D., University of California, Santa Barbara.
- Strand, Paul J. (1977)** *Dean, College of Arts and Letters; Professor of Political Science*
A.B., Macalester College; M.A., University of Illinois, Chicago; Ph.D., Ohio State University.
- Streshly, William A. (1990)** *Professor of Administration, Rehabilitation and Postsecondary Education*
B.A., University of California, Berkeley; M.A., San Diego State University; Ph.D., United States International University.
- Strom, David W. (1968)** *Professor of Teacher Education*
A.B., M.A., Ed.D., Wayne State University.
- Stumph, William E. (1983)** *Professor of Chemistry*
B.S., Purdue University; Ph.D., California Institute of Technology.
- Stutz, Frederick P. (1970)** *Professor of Geography*
A.B., Valparaiso University; M.S., Northwestern University; Ph.D., Michigan State University.
- Sucato, Vincent (1974)** *Assistant Professor of Social Work*
A.B., State University of New York; M.S.W., Fordham University; Ph.D., Rutgers State University.
- Sucec, Anthony A. (1967)** *Professor of Exercise and Nutritional Sciences*
A.B., M.A., San Diego State University; Ed.D., University of California, Berkeley.
- Supernak, Janusz C. (1984)** *Professor of Civil and Environmental Engineering*
B.S., M.S., Ph.D., Technical University of Warsaw.
- Sutton, L. Paul (1981)** *Professor of Public Administration and Urban Studies*
B.A., University of Kansas; M.A., Ph.D., State University of New York.
- Sweedler, Alan R. (1980)** *Assistant Vice President, International Programs; Professor of Physics*
B.S.C., The City University of New York; Ph.D., University of California, San Diego.
- Sweedler-Brown, Carol O. (1975)** *Associate Dean, College of Arts and Letters; Professor of Rhetoric and Writing Studies*
B.A., University of Massachusetts at Amherst; Ph.D., University of California, San Diego.
- Swiniarski, Roman W. (1988)** *Professor of Mathematical and Computer Sciences*
M.S., Ph.D., Warsaw Technical University.
- Szeto, Andrew Y. J. (1983)** *Professor of Electrical and Computer Engineering*
B.S., University of California, Los Angeles; M.S.E.E., M.E.E.E., University of California, Berkeley; Ph.D., University of California, Los Angeles. Registered Professional Engineer.
- Talavera, Gregory A. (1994)** *Assistant Professor of Public Health*
B.A., M.P.H., San Diego State University; M.D., University of Utah.
- Talbert, Freddie D. (1968)** *Associate Professor of Astronomy*
A.B., Ph.D., University of Texas.
- Tarokh, Mahmoud (1990)** *Professor of Mathematical and Computer Sciences*
B.S., Tehran Polytechnic Institute; M.S., University of Birmingham; Ph.D., University of New Mexico.
- Templin, Jacques D. (1962)** *Professor of Physics*
A.B., University of California, Berkeley; M.A., Ph.D., University of California, Los Angeles.

Full-Time Faculty

- Terrell, Louis M. (1969)** *Professor of Political Science*
A.B., Williams College; M.A., Ph.D., Stanford University.
- Terry-Guyer, Linda L. (1990)** *Associate Professor of Counseling and School Psychology*
B.S., University of Wisconsin; M.A., Cambridge College; Ed.D., University of Massachusetts.
- Thal, Donna J. (1990)** *Professor of Communicative Disorders*
B.A., M.S., Brooklyn College of the City University of New York; Ph.D., Graduate School and University Center of the City University of New York.
- Thayer, Mark A. (1981)** *Professor of Economics*
B.A., Ph.D., University of New Mexico.
- Thompson, Gordon M. (1969)** *Interim Dean, College of Education; Associate Professor of Counseling and School Psychology*
A.B., Muskingum College; M.Div., Pittsburgh Theological Seminary; M.A., San Diego State University; Ph.D., Arizona State University.
- Thompson, Larry D. (1982)** *Associate Professor of Mechanical Engineering*
B.E., Youngstown State University; M.S., Ph.D., University of California, Berkeley.
- Thompson, Patrick W. (1990)** *Professor of Mathematical and Computer Sciences*
B.S., Central Washington University; M.Ed., Ed.D., University of Georgia.
- Thorbjarnarson, Kathryn W. (1991)** *Associate Professor of Geological Sciences*
B.S., University of Rochester; M.S., North Carolina State University; Ph.D., University of California, Los Angeles.
- Thyagarajan, Kadayam S. (1980)** *Professor of Electrical and Computer Engineering*
B.E., College of Engineering, Madras, India; M. Tech., Indian Institute of Technology; Doctorate of Engineering, Concordia University, Canada.
- Tisue, Garold L. (1976)** *Director, Community-based Learning*
B.S., California State University, Northridge; M.S., California State University, Los Angeles.
- Tong, William G. (1985)** *Professor of Chemistry*
B.S., Mandalay University; Ph.D., Iowa State University.
- Toole, Howard R. (1972)** *Professor of Accountancy*
B.S., M.B.A., University of California, Berkeley; Ph.D., University of Iowa.
- Toombs, Charles P. (1991)** *Associate Professor of Africana Studies*
B.A., M.A., M.S., Ph.D., Purdue University.
- Torikachvili, Milton S. (1987)** *Professor of Physics*
B.S., Rio Grande do Sul University, Brazil; M.S., Ph.D., Campinas State University, Brazil.
- Tran, My Luong (1981)** *Associate Professor of Teacher Education*
B.A., Marymount College; M.A., Ph.D., Southern Illinois University.
- Treadway, Gerald H., Jr. (1970)** *Professor of Teacher Education*
A.B., M.A., San Diego State University; Ed.D., University of Arizona.
- Trout, Hugh M. (1997)** *Assistant Professor of Aerospace Studies*
B.A., University of Nebraska; M.P.A., University of Wyoming.
- Troxell, Eugene A. (1966)** *Associate Professor of Philosophy*
A.B., Gonzaga University; M.A., Ph.D., University of Chicago.
- Tsoukas, Constantine (1986)** *Professor of Biology*
B.S., University of San Francisco; Ph.D., University of California, San Francisco.
- Tumlin, Markel D. (1998)** *Senior Assistant Librarian*
B.A., M.A., M.S.L.S., University of Kentucky.
- Turhollow, C. Anne (1982)** *Librarian*
B.S., Loyola Marymount University; M.S., Stanford University; M.L.I.S., University of California, Berkeley.
- Tyagi, Pradeep K. (1982)** *Professor of Marketing*
B.S., Jiwaji University, India; M.S., M.B.A., Ph.D., University of Missouri.
- Uises, Christina L. (1998)** *Assistant Professor of Naval Science*
B.A., Harvard University.
- Underhill, Robert (1972)** *Professor of Linguistics*
A.B., Harvard College; Ph.D., Harvard University.
- Valles, Eugene C. (1993)** *Assistant Professor of Special Education*
B.A., M.A., Ph.D., University of New Mexico.
- Vandenberg, Pieter A. (1969)** *Professor of Finance*
B.S., California State Polytechnic University, Pomona; M.B.A., D.B.A., University of Southern California.
- Van Sickle, Douglas J. (1978)** *Director, Counseling and Psychological Services*
B.S., University of Washington; M.A., Bradley University; Ph.D., University of Utah.
- Varaiya, Nikhil P. (1988)** *Professor of Finance*
B.S., Bombay University; M.B.A., Ph.D., University of Washington.
- Vartanian, Pershing (1968)** *Professor of History*
B.S., Wayne State University; M.A., Columbia University; Ph.D., University of Michigan.
- Velasquez, Roberto J. (1987)** *Associate Professor of Psychology*
B.A., University of California, Riverside; M.S., Harvard University; Ph.D., Arizona State University.
- Venable, Carol F. (1987)** *Associate Professor of Accountancy*
B.S., M.Ac., Ph.D., University of Arizona. Certified Public Accountant.
- Verity, Larry S. (1984)** *Professor of Exercise and Nutritional Sciences*
B.S., State University of New York, Cortland; M.Ed., University of Virginia; Ph.D., Purdue University.
- Vik, Gretchen N. (1975)** *Professor of Information and Decision Systems*
A.B., Rice University; M.A., University of South Dakota; Ph.D., University of Florida.
- Villarino, José R. (1969)** *Professor of Chicana and Chicano Studies*
B.S., M.A., Northern Arizona University; Ph.D., Union Graduate School.
- Vinge, Jon C. (1998)** *Assistant Professor of Naval Science*
B.A., University of Minnesota.
- Vinge, Vernor S. (1972)** *Associate Professor of Mathematical and Computer Sciences*
B.S., Michigan State University; M.A., Ph.D., University of California, San Diego.
- Vuskovic, Marko I. (1986)** *Professor of Mathematical and Computer Sciences*
B.S., M.S., University of Belgrade; Ph.D., University of Zagreb.
- Wahl, Patricia R. (1990)** *Professor of Nursing*
B.S., M.S., Ph.D., University of Cincinnati.
- Walawender, Michael J. (1972)** *Professor of Geological Sciences*
B.S., Syracuse University; M.S., South Dakota School of Mines and Technology; Ph.D., Pennsylvania State University.
- Walden O'Cull, Kathleen J. (1988)** *Lecturer in Social Work*
B.S.W., University of North Dakota; M.S.W., University of Illinois at Urbana-Champaign.
- Walker, Carolyn L. (1986)** *Professor of Nursing*
B.S.N., California State University, Fullerton; M.S.N., California State University, Los Angeles; Ph.D., University of Utah.
- Wall, Carey G. (1971)** *Professor of English*
A.B., University of Michigan; Ph.D., Stanford University.
- Wallace, William J. (1969)** *Associate Professor of Geological Sciences and Physics*
A.B., St. Michael's College, Vermont; M.S., Tuskegee Institute; M.S., Ph.D., Oregon State University.
- Walsh, Patrick J. (1994)** *Assistant Professor of Chemistry*
B.A., University of California, San Diego; Ph.D., University of California, Berkeley.
- Walshok, Marco G. (1969)** *Assistant Professor of Public Administration and Urban Studies*
A.B., University of Southern California; M.A., Ph.D., Indiana University.
- Wang, Kuo Chang (1980)** *Professor of Aerospace Engineering and Engineering Mechanics*
B.S., Ordnance Eng. College; M.S., Virginia Polytechnic Institute; Ph.D., Rensselaer Polytechnic Institute.
- Ward-Steinman, David (1961)** *Professor of Music*
B.M., Florida State University; M.M., D.M.A., University of Illinois.
- Warman, Harold D. (1977)** *Lecturer in Music*
A.B., M.A., University of Redlands.
- Warschauer, Thomas M. D. (1977)** *Professor of Finance*
B.S., M.S., Ph.D., University of Colorado, Boulder.
- Washington, Patricia Ann (1996)** *Assistant Professor of Women's Studies*
B.A., M.A., Old Dominion University; Ph.D., State University of New York at Binghamton.
- Watson, Maria-Barbara (1976)** *Professor of Women's Studies*
M.A., Goethe Universität; Ph.D., University of Vienna.
- Wauchope, Mary M. (1989)** *Associate Professor of German*
B.A., M.A., University of California, Riverside; Ph.D., University of California, Berkeley.
- Webb, Charlotte (1975)** *Associate Professor of Linguistics*
A.B., Ph.D., University of Texas.
- Weber, Shirley N. (1972)** *Associate Professor of Africana Studies*
A.B., M.A., Ph.D., University of California, Los Angeles.
- Weeks, John R. (1974)** *Professor of Geography*
A.B., M.A., Ph.D., University of California, Berkeley.

- Weitzel, Al R. (1973)** *Professor of Communication*
A.B., Bradley University; M.A., South Illinois University; Ph.D., University of Southern California.
- Westermo, Bruce D. (1980)** *Professor of Civil and Environmental Engineering*
B.S., Illinois Institute of Technology; M.S., Ph.D., California Institute of Technology.
- Weston, Thomas S. (1974)** *Professor of Philosophy*
S.B., Ph.D., Massachusetts Institute of Technology.
- Wheeler, Mark R. (1995)** *Assistant Professor of Philosophy*
B.A., Colgate University; M.A., Ph.D., University of Rochester.
- Whisenant, John D. (1995)** *Assistant Professor of Aerospace Studies*
B.S., United States Air Force Academy; M.B.A., University of Phoenix.
- White, Phillip M. (1985)** *Librarian*
B.A., University of Houston; M.L.S., University of Texas.
- Whitman, David G. (1969)** *Associate Professor of Mathematical and Computer Sciences*
A.B., M.S., Emory University; Ph.D., University of California, Riverside.
- Whitney, Dan (1966)** *Professor of Anthropology*
A.B., M.A., Ph.D., Michigan State University; J.D., Western State University.
- Whitney, Roger E. (1985)** *Associate Professor of Mathematical and Computer Sciences*
B.S., North Dakota State University; Ph.D., University of California, San Diego.
- Whittenburg, Gerald E. (1976)** *Professor of Accountancy*
B.S., M.S., Ph.D., University of Houston. Certified Public Accountant.
- Whittington, O. Ray (1978)** *Professor of Accountancy*
B.B.A., Sam Houston State University; M.S., Texas Tech University; Ph.D., University of Houston. Certified Public Accountant.
- Wiese, Andrew (1996)** *Assistant Professor of History*
B.A., University of Iowa; M.A., Ph.D., Columbia University.
- Wiksten, Denise A. (1994)** *Assistant Professor of Exercise and Nutritional Sciences*
B.S., Central Michigan University; M.E., Ph.D., University of Virginia.
- Wilbur, Robert W. (1974)** *Associate Dean and Director for Undergraduate Program, College of Business Administration; Associate Professor of Finance*
A.B., University of California, Riverside; M.S., San Diego State University; Ph.D., University of Washington.
- Wild, Rosemary (1997)** *Assistant Professor of Information and Decision Systems*
B.A., M.A., M.S., Ph.D., University of Arizona.
- Wilfley, Denise E. (1996)** *Associate Professor of Psychology*
B.S., Central Missouri State University; M.A., Ph.D., University of Missouri.
- Williams, Candace M. (1989)** *Lecturer in Business Administration*
E.M.B.A., Claremont Graduate School.
- Williams, Diane R. (1975)** *Associate Professor of Communicative Disorders*
A.B., University of Kentucky; M.A., Northwestern University.
- Williams, Kathy S. (1987)** *Associate Professor of Biology*
B.A., University of Texas at Austin; Ph.D., Stanford University.
- Williams, Laura A. (1997)** *Assistant Professor of Marketing*
B.A., Northwestern State University; M.B.A., Baylor University; Ph.D., Louisiana State University.
- Williams, Richard K., Jr. (1995)** *Lecturer in Management*
B.S., Pennsylvania State University; M.B.A., Ph.D., Claremont Graduate School.
- Williams, Stephen J. (1980)** *Professor of Public Health*
B.S., Carnegie-Mellon University; M.S., Massachusetts Institute of Technology; S.M., Sc.D., Harvard University.
- Williams, Susan L. (1990)** *Professor of Biology*
B.S., University of Michigan; M.S., University of Alaska; Ph.D., University of Maryland.
- Williams, Terry A. (1986)** *Lecturer in Rhetoric and Writing Studies*
B.A., College of Wooster; M.A., San Diego State University.
- Williamson, James E. (1968)** *Professor of Accountancy*
A.B., Northland College; M.S., Ph.D., University of Minnesota. Certified Public Accountant.
- Willis, George C. (1967)** *Associate Professor of Dance*
A.B., M.A., California State University, Los Angeles; M.F.A., Arizona State University.
- Willis, Winnie O. (1984)** *Professor of Public Health*
B.A., Jersey City State College; M.S., Harvard University; Sc.D., Johns Hopkins University.
- Wilson, Carlos G. (1992)** *Professor of Spanish*
B.A., Loyola Marymount University; M.A., Ph.D., University of California, Los Angeles.
- Wilson, Carole (1981)** *Associate Librarian*
B.A., Ohio Wesleyan University; M.R.E., Union Theological Seminary, New York City; M.L.S., University of California, Los Angeles.
- Wilson, Patricia A. (1990)** *Associate Professor of Public Administration and Urban Studies*
B.A., M.A., University of Michigan; D.P.A., George Mason University.
- Winslow, Robert W. (1965)** *Professor of Sociology*
A.B., California State University, Long Beach; M.A., Ph.D., University of California, Los Angeles.
- Wolf, R. Craig (1987)** *Professor of Theatre*
B.A., Knox College; M.F.A., Stanford University.
- Wood, James L. (1975)** *Professor of Sociology*
A.B., M.A., Ph.D., University of California, Berkeley.
- Woodrow, William G. (1975)** *Associate Director for Facilities, Housing and Residential Life*
B.S., University of California, Davis; M.Ed., University of Missouri-Columbia.
- Wotruba, Thomas R. (1962)** *Professor of Marketing*
B.B.A., M.B.A., Ph.D., University of Wisconsin.
- Wozniak, Dolores A. (1976)** *Dean, College of Health and Human Services; Professor of Nursing*
B.S., Hunter College; M.A., Ed.M., Ed.D., Columbia University.
- Wright, Penny L. (1972)** *Professor of Management*
A.B., M.B.A., Ph.D., University of California, Irvine.
- Wright, Richard D. (1964)** *Professor of Geography*
A.B., A.M., Indiana University; Ph.D., University of Kansas.
- Wulfek, Beverly B. (1994)** *Associate Professor of Communicative Disorders*
B.A., M.A., University of California, Santa Barbara; Ph.D., University of California, San Diego.
- Wulfemeyer, K. Tim (1976, except F'80-S'87)** *Professor of Communication*
A.B., San Diego State University; M.S., Iowa State University; Ed.D., University of California, Los Angeles.
- Yang, Yeong-Ling (1988)** *Associate Professor of Information and Decision Systems*
B.A., Cheng-Kung University, Taiwan; M.S., Ph.D., University of Florida.
- Yapelli, Tina Marie (1985)** *Associate Professor of Art*
B.A., Loyola Marymount University; M.A., California State University, Fullerton.
- Yaremko, Robert M. (1969)** *Professor of Psychology*
A.B., University of Florida; M.A., Ph.D., Ohio University.
- Yeager, Bill (1985)** *Professor of Music*
B.M., M.M., North Texas State University.
- Young, Arthur (1967)** *Professor of Astronomy*
B.S., Allegheny College; M.A., Ph.D., Indiana University.
- Young, Ronald R. (1971)** *Associate Professor of Spanish*
A.B., Wisconsin State University; A.M., Ph.D., University of Illinois.
- Young, Russell L. (1987)** *Associate Professor of Policy Studies in Language and Cross-Cultural Education*
B.A., University of California, San Diego; M.Ed., University of Hawaii; Ph.D., San Diego State University and Claremont Graduate School.
- Yu, Elena S. H. (1990)** *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.
- Zhang, Zheng-Sheng (1990)** *Associate Professor of Chinese*
B.A., Beijing Teacher's College, Peoples Republic of China; M.A., Ph.D., Ohio State University.
- Zimmerman, Bonnie (1978)** *Professor of Women's Studies*
A.B., Indiana University; Ph.D., State University of New York at Buffalo.
- Zuniga, Maria E. (1985)** *Professor of Social Work*
B.A., University of San Diego; M.S.W., University of California, Berkeley; Ph.D., Brandeis University.
- Zyskind, Judith W. (1982)** *Professor of Biology*
B.S., University of Dayton; M.S., Ph.D., Iowa State University.

Emeritus Faculty

Day, Thomas B., Ph.D., President (1978-1996)	<i>Professor of Physics</i>	Benjamin, Robert L., Ph.D. (1953-1986)	<i>Professor of Speech Communication</i>
Golding, Brage, Ph.D., President (1972-1977)	<i>Professor of Chemistry and Engineering</i>	Benson, Jackson J., Ph.D. (1966-1997)	<i>Professor of English</i>
Abbott, Mitchel T., Ph.D. (1964-1992)	<i>Professor of Chemistry</i>	Benton, Carl W., Ed.D. (1948-1983)	<i>Professor of Physical Education</i>
Ackerly, Jr., Robert S., Ed.D. (1963-1990)	<i>Counselor of the University Advising Center; Professor of Teacher Education</i>	Berg, Robert V., M.F.A. (1963-1992)	<i>Professor of Art</i>
Adams, Elsie B., Ph.D. (1971-1994)	<i>Professor of English and Comparative Literature</i>	Bigelow, Marybelle S., M.A. (1956-1980)	<i>Professor of Art</i>
Adams, William J., Ph.D. (1955-1983)	<i>Professor of Speech Communication</i>	Bigger, W. Richard, Ph.D. (1952-1981)	<i>Professor of Public Administration and Urban Studies</i>
Ajemian, James A., Ph.D. (1970-1998)	<i>Assistant Professor of Social Work</i>	Biggs, Millard R., Ph.D. (1958-1986)	<i>Professor of Music</i>
Akers, Fred C., Ph.D. (1966-1976)	<i>Associate Professor of Marketing</i>	Bilteman, Henry L., M.A. (1956-1977)	<i>Assistant Professor of Mechanical Engineering</i>
Alexander, James V., Ph.D. (1967-1984)	<i>Associate Professor of Botany</i>	Birch, Aileen J., M.A. (1949-1978)	<i>Assistant Professor of Elementary Education</i>
Alf, Jr., Edward F., Ph.D. (1963-1988)	<i>Professor of Psychology</i>	Black, Barbara B., M.S. (1970-1988)	<i>Professor of Nursing</i>
Altamura, Nicholas C., Ph.D. (1967-1983)	<i>Associate Professor of Secondary Education</i>	Blanc, Sam S., Ed.D. (1966-1981)	<i>Professor of Elementary Education</i>
Anderson, Allan W., Ph.D. (1962-1985)	<i>Professor of Religious Studies</i>	Blick, James D., Ph.D. (1966-1985)	<i>Associate Professor of Geography</i>
Anderson, Evans L., Ed.D. (1954-1981)	<i>Professor of Education</i>	Bloomberg, Jr., Warner, Ph.D. (1973-1989)	<i>Professor of Sociology</i>
Anderson, Graydon K., Ph.D. (1949-1979)	<i>Professor of Economics</i>	Blyth, John D., Ed.D. (1957-1983)	<i>Professor of Music</i>
Anderson, Paul V., M.M. (1954-1983)	<i>Professor of Music</i>	Boggs, Wilma T., M.S. (1971-1977)	<i>Assistant Professor of Family Studies and Consumer Sciences</i>
Andrain, Charles F., Ph.D. (1964-1998)	<i>Professor of Political Science</i>	Bohnsack, Kurt K., Ph.D. (1956-1983)	<i>Professor of Zoology</i>
Andrus, Ruth, Ph.D. (1962-1982)	<i>Professor of Physical Education</i>	Boney, Elaine E., Ph.D. (1963-1986)	<i>Professor of German</i>
Anthony, Sally M., Ed.D. (1965-1990)	<i>Professor of Educational Technology</i>	Boostrom, Ronald L., D.Crim. (1971-1996)	<i>Professor of Public Administration and Urban Studies</i>
Apple, L. Eugene, Ph.D. (1985-1991)	<i>Assistant Professor of Marketing</i>	Boskin, Warren D., Ed.D. (1965-1998)	<i>Associate Professor of Public Health</i>
Archer, E. C. Jack, Ed.D. (1956-1979)	<i>Professor of Information Systems</i>	Botkin, Patricia T., Ed.D. (1969-1988)	<i>Associate Professor of Teacher Education</i>
Atchison, Thomas J., Ph.D. (1965-1992)	<i>Professor of Management</i>	Bradley, Wallace W., M.A. (1961-1973)	<i>Assistant Professor of Secondary Education</i>
Atkins, Michael D., Ph.D. (1970-1992)	<i>Professor of Biology</i>	Brady, F. Neil, Ph.D. (1982-1994)	<i>Professor of Management</i>
Ayala, Reynaldo, Ph.D. (1969-1996)	<i>Professor of Geography, Imperial Valley Campus</i>	Brady, Richard C., Ph.D. (1977-1998)	<i>Associate Professor of Special Education</i>
Babilot, George, Ph.D. (1956-1991)	<i>Professor of Economics</i>	Brandt, Charles L., Ph.D. (1957-1992)	<i>Professor of Biology</i>
Bailey, Gerald D., Ed.D. (1964-1992)	<i>Professor of Industrial Technology</i>	Branstetter, R. Deane, Ph.D. (1955-1981)	<i>Professor of Mathematical Sciences</i>
Baily, Kamilla U., M.S.W. (1966-1977)	<i>Associate Professor of Social Work</i>	Brashear, Howard C., Ph.D. (1968-1992)	<i>Professor of English</i>
Baker, Douglas L., Ed.D. (1952-1979, except 1953)	<i>Professor of Elementary Education</i>	Bray, Henry G., Ph.D. (1962-1997)	<i>Professor of Mathematical and Computer Sciences</i>
Baker, James R., Ph.D. (1956-1986, except 1961-1962)	<i>Professor of English and Comparative Literature</i>	Brennen, E. Clifford, D.S.W. (1978-1983)	<i>Professor of Social Work</i>
Baker, Keefe L., M.F.A. (1965-1984)	<i>Professor of Art</i>	Briggs, Robert M., Ed.D. (1957-1985)	<i>Professor of Teacher Education</i>
Baldwin, Elmer D., Ed.D. (1963-1988)	<i>Professor of Education, Imperial Valley Campus</i>	Broadbent, Harry H., M.S. (1949-1979)	<i>Associate Professor of Physical Education</i>
Ballesteros, David, Ph.D. (1983-1998)	<i>Dean, Imperial Valley Campus</i>	Broderick, William A., Ed.D. (1977-1994)	<i>Administrator, Media Technology Services</i>
Barber, William F., Ph.D. (1959-1991)	<i>Director, Graduate Programs, College of Business Administration; Professor of Marketing</i>	Brodshatzer, Arthur, D.B.A. (1956-1986)	<i>Professor of Accountancy</i>
Barckley, Robert E., Ph.D. (1955-1985)	<i>Professor of Economics</i>	Brooks, Baylor, B.A. (1931-1966)	<i>Professor of Geology</i>
Barclay, A. Bernice, M.A.L.S. (1962-1986)	<i>Associate Librarian</i>	Brown, Lee, Ph.D. (1978-1994)	<i>Professor of Journalism</i>
Barnes, Alfred C., H.S.D. (1977-1981)	<i>Associate Professor of Health Science</i>	Brown, Robert E., Ph.D. (1979-1992)	<i>Professor of Music</i>
Barone, Joan F., M.S. (1960-1992)	<i>Associate Professor of Physical Education</i>	Brown, Ruth M. C., Ph.D. (1971-1986)	<i>Associate Professor of English and Comparative Literature</i>
Bauer, Edward G., M.S. (1956-1976)	<i>Professor of Mechanical Engineering</i>	Brown, William L., B.S.E.E., Professional Degree in Electrical Engineering (1962-1983)	<i>Associate Professor of Electrical and Computer Engineering</i>
Baxter, William L., Ph.D. (1963-1992)	<i>Professor of Biology</i>	Bruderer, Conrad, D.M. (1963-1996)	<i>Professor of Music</i>
Becklund, Lester A., Ph.D. (1967-1995)	<i>Professor of Teacher Education</i>	Brunson, Theodore R., D.M.A. (1966-1991)	<i>Professor of Music</i>
Bedore, Robert L., M.S.M.E., Professional Degree in Mechanical Engineering (1959-1992)	<i>Professor of Mechanical Engineering</i>	Bumpus, Jerry D., M.F.A. (1971-1996)	<i>Professor of English</i>
Bell, Jr., Charles B., Ph.D. (1981-1992)	<i>Professor of Mathematical Sciences</i>	Burdick, David L., Ph.D. (1968-1995)	<i>Associate Professor of Mathematical Sciences</i>
Benenson, Abram S., M.D. (1982-1992)	<i>Lecturer in Public Health</i>	Burgess, William C., Ed.D. (1961-1992)	<i>Professor of Health Science</i>

Burnett, Gail A., Ph.D. (1947-1968)	<i>Professor of English and Classics</i>	Dharmarajan, Sangiah Nadar, Ph.D. (1960-1997)	<i>Professor of Aerospace Engineering and Engineering Mechanics</i>
Burnside, Houston M., Ph.D. (1968-1991)	<i>Professor of Teacher Education</i>	Dicken, Charles F., Ph.D. (1962-1995)	<i>Professor of Psychology</i>
Butler, Harry, Ph.D. (1975-1990)	<i>Professor of Social Work</i>	Dickerson, Mary E., Ph.D. (1967-1990)	<i>Assistant Professor of Family Studies and Consumer Sciences</i>
Campbell, L. Beryl, M.A. (1947-1973)	<i>Associate Professor of Elementary Education</i>	Dickinson, Fidelia R., Ph.D. (1966-1990)	<i>Librarian</i>
Cannon, Nona H., Ed.D. (1959-1979)	<i>Professor of Family Studies and Consumer Sciences</i>	Diehl, William P., Ph.D. (1968-1997)	<i>Associate Professor of Biology</i>
Capp, Martin P., M.S. (1953-1975)	<i>Dean, School of Engineering</i>	Dillon (Salerno), M. Constance, M.S. (1964-1992)	<i>Professor of Nursing</i>
Carmichael, Nancy M., Ph.D. (1968-1995)	<i>Assistant Professor of Biology</i>	Dirks, John H., M.F.A. (1947-1976)	<i>Professor of Art</i>
Carnevale, James P., Ph.D. (1967-1992)	<i>Professor of Counseling and School Psychology</i>	Dirksen, Dennis A., Ed.D. (1969-1992)	<i>Professor of Industrial Technology</i>
Carpenter, Roger E., Ph.D. (1963-1993)	<i>Professor of Biology</i>	Doorlag, Donald H., Ph.D. (1970-1998)	<i>Professor of Special Education</i>
Carter, J. E. Lindsay, Ph.D. (1962-1992)	<i>Professor of Physical Education</i>	Dorris, Helen L., M.S. (1952-1982)	<i>Professor of Family Studies and Consumer Sciences</i>
Case, Thomas E., Ph.D. (1961-1998)	<i>Professor of Spanish</i>	Downing, Christine R., Ph.D. (1974-1992)	<i>Professor of Religious Studies</i>
Castro (Castillo), Susana D., Ph.D. (1985-1994)	<i>Professor of Spanish</i>	Drobnies, Saul I., Ph.D. (1963-1994)	<i>Professor of Mathematical Sciences</i>
Cave, Mary F., M.A. (1946-1977)	<i>Associate Professor of Physical Education</i>	Duckworth, Joseph B., Ed.D. (1968-1998)	<i>Professor of Teacher Education</i>
Chan, Lillian L., M.A.L.S. (1969-1998)	<i>Librarian</i>	DuFault, David V., Ph.D. (1962-1999)	<i>Associate Professor of History</i>
Chan, S. Yun, Ph.D. (1965-1979)	<i>Professor of Electrical Engineering</i>	Dukas, Vyta, Ph.D. (1959-1988)	<i>Professor of Russian</i>
Charles, Carol M., Ph.D. (1961-1988)	<i>Professor of Teacher Education</i>	Dumlao, Gerald C., M.F.A. (1977-1998)	<i>Associate Professor of Art</i>
Chater, Elizabeth E., M.A. (1964-1977)	<i>Professor of English</i>	Dunkle, Harvey I., Ph.D. (1963-1987)	<i>Associate Professor of German</i>
Clark, Margaret A., Ed.D. (1966-1986)	<i>Associate Professor of Teacher Education</i>	Eagle, John, Ed.D. (1946-1974)	<i>Professor of Mathematics</i>
Clark, Mary E., Ph.D. (1969-1986)	<i>Professor of Biology</i>	Earnest, Sue W., Ph.D. (1947-1973)	<i>Professor of Speech Pathology and Audiology</i>
Coffey, Jr., Dewitt, Ph.D. (1968-1998)	<i>Professor of Chemistry</i>	Eidemiller, Donald I., Ph.D. (1956-1983)	<i>Professor of Geography</i>
Cohen, Lester M., M.S.W. (Under contract 1969-1970; 1970-1984)	<i>Assistant Professor of Social Work</i>	Eisemann, Kurt, Ph.D. (1982-1992)	<i>Professor of Mathematical Sciences</i>
Cohn, Theodore J., Ph.D. (1964-1992)	<i>Professor of Biology</i>	El-Assal, Mohamed M.E., Ph.D. (1967-1992)	<i>Professor of Sociology</i>
Collier, Boyd D., Ph.D. (1966-1998)	<i>Professor of Biology</i>	Elgin, Suzette, Ph.D. (1972-1981)	<i>Associate Professor of Linguistics</i>
Collier, Gerald, Ph.D. (1961-1995)	<i>Professor of Biology</i>	Elliott, Rosalie C., Ph.D. (1968-1982)	<i>Professor of Elementary Education</i>
Colombo, Albert A., M.A. (1967-1982)	<i>Assistant Professor of Geography</i>	Erickson, Paul, Ed.D. (1963-1986)	<i>Professor of Teacher Education</i>
Conway, John B., Ph.D. (1981-1992)	<i>Professor of Public Health</i>	Erzen, Paul E., Ph.D. (1978-1987)	<i>Associate Professor of Management, Imperial Valley Campus</i>
Cooke, Gwen C., Ph.D. (1978-1992)	<i>Professor of Family Studies and Consumer Sciences</i>	Estes, Russell G., Ed.D. (1963-1992)	<i>Professor of Music</i>
Cooper, Gwen O., Ed.D. (1966-1991)	<i>Counselor</i>	Etheridge, Richard E., Ph.D. (1961-1992)	<i>Professor of Biology</i>
Coox, Alvin D., Ph.D. (1964-1997)	<i>Professor of History</i>	Faulkner, D. George, M.S. (1983-1992)	<i>Lecturer in Aerospace Engineering and Engineering Mechanics</i>
Cottrell, Don M., Ph.D. (1962-1998)	<i>Professor of Physics</i>	Feeney, William R., Ph.D. (1974-1997)	<i>Associate Professor of Information and Decision Systems</i>
Covington, Donald P., M.A. (1965-1992)	<i>Professor of Art</i>	Fehr, Elsa, Ph.D. (1971-1997)	<i>Professor of Physics</i>
Cox, George W., Ph.D. (1962-1996)	<i>Professor of Biology</i>	Feierabend, Ivo K., Ph.D. (1959-1992)	<i>Professor of Political Science</i>
Cox, Thomas R., Ph.D. (1967-1996)	<i>Professor of History</i>	Ferrel, Dale B., M.B.A. (1957-1977)	<i>Professor of Accounting</i>
Crain, Melvin, Ph.D. (1959-1983)	<i>Professor of Political Science</i>	Fetzer, Leland A., Ph.D. (1966-1992)	<i>Professor of Russian</i>
Crawford, Maurice L., Ed.D. (1954-1988)	<i>Professor of Information and Decision Systems</i>	Fields, Carolyn B., M.L.S. (1985-1997)	<i>Associate Librarian</i>
Crisley, Cornelius J., M.L.S. (1962-1990)	<i>Senior Assistant Librarian</i>	Filner, Robert E., Ph.D. (1970-1992)	<i>Associate Professor of History</i>
Crouch, James E., Ph.D. (1932-1973)	<i>Professor of Zoology</i>	Fisch, Arline M., M.A. (1961-1996)	<i>Professor of Art</i>
Cullen, F. Patricia, Ph.D. (1964-1985)	<i>Professor of Physical Education</i>	Fisher, Horace H., Ph.D. (1955-1977)	<i>Associate Professor of Finance</i>
Curry, Joan F., Ed.D. (1972-1997)	<i>Professor of Teacher Education</i>	Filtz, Richard A., Ph.D. (1959-1991)	<i>Professor of Mechanical Engineering</i>
Darley, Richard D., Ph.D. (1961-1980)	<i>Professor of Marketing</i>	Flagg, Denis A., Ph.D. (1955-1986)	<i>Professor of Economics</i>
Davies, Darlene G., Ed.S. (1976-1994)	<i>Assistant Professor of Communicative Disorders</i>	Flemion, Philip F., Ph.D. (1968-1998)	<i>Associate Professor of History</i>
Davis, Craig H., Ph.D. (1967-1991)	<i>Assistant Professor of Biology</i>	Forbing, Shirley E., Ed.D. (1969-1992)	<i>Professor of Special Education</i>
Davis, Inger P., Ph.D. (1977-1996)	<i>Professor of Social Work</i>	Ford, David H., Ed.D. (1967-1994)	<i>Associate Professor of Teacher Education</i>
Deaton, Edmund I., Ph.D. (1960-1992)	<i>Professor of Mathematical Sciences</i>	Ford, Richard F., Ph.D. (1964-1997)	<i>Professor of Biology</i>
DeLora, Jack R., Ph.D. (1955-1986)	<i>Professor of Sociology</i>	Forman, Robert B., Ed.D. (1963-1985)	<i>Professor of Music</i>
Denman, Mary Edel, M.A. (1966-1992)	<i>Professor of Academic Skills</i>	Fountain, Leonard D., Ph.D. (1960-1990)	<i>Professor of Mathematical Sciences</i>
Dessel, Norman F., Ph.D. (1961-1992)	<i>Professor of Natural Science</i>	Fox, Kathleen, Ph.D. (1962-1986)	<i>Professor of Physical Education</i>
Deutsch, Francine, Ph.D. (1981-1999)	<i>Professor of Child and Family Development</i>	Franklin, Robert J., Ph.D. (1967-1988)	<i>Associate Professor of History, Imperial Valley Campus</i>
		Frey, Leonard H., Ph.D. (1956-1989)	<i>Professor of Linguistics</i>

Emeritus Faculty

Frick, Fay A., Ph.D. (1970-1990)	Associate Professor of Art	Harper, Leroy A., Ed.D. (1959-1979)	Professor of Health Science
Friedman, Abraham M., Ph.D. (1963-1983)	Associate Professor of Physical Education	Harris, Mary E., M.A.L.S. (1982-1992)	Associate Librarian
Friedman, Maurice Stanley, Ph.D. (1973-1991)	Professor of Religious Studies, Philosophy, and Comparative Literature	Harvey, A. Raymond, Ph.D. (1949-1983)	Professor of Mathematical Sciences
Futch, David G., Ph.D. (1967-1998)	Associate Professor of Biology	Hawley, Peggy J., Ph.D. (1968-1988)	Professor of Counselor Education
Galbraith, III, Oliver, Ph.D. (1955-1992)	Professor of Information and Decision Systems	Haworth, Glenn O., D.S.W. (1966-1987)	Professor of Social Work
Gallo, Jr., Philip S., Ph.D. (1963-1996)	Professor of Psychology	Hazen, William E., Ph.D. (1962-1988)	Professor of Biology
Gange, Samuel J., Ed.D. (1969-1995) ..	Counseling Psychologist, Counseling and Psychological Services	Head, Gerald L., Ph.D. (1964-1999)	Professor of Spanish
Garrison, Betty B., Ph.D. (1962-1996)	Professor of Mathematical Sciences	Heighton, Elizabeth J., M.S. (1966-1992)	Professor of Telecommunications and Film
Garrison, John D., Ph.D. (1956-1983)	Professor of Physics	Heinrichs, Waldo, Ph.D. (1991-1996)	Professor of History
Gast, David K., Ed.D. (1963-1991)	Professor of Teacher Education	Hellberg, Lars H., Ph.D. (1956-1992)	Professor of Chemistry
Gastil, R. Gordon, Ph.D. (1959-1993)	Professor of Geological Sciences	Hewes, Dorothy W., Ph.D. (1974-1992)	Professor of Family Studies and Consumer Sciences
Gates, Gerald F., Ed.D. (1955-1986)	Professor of Teacher Education	Higgins, Winifred H., Ph.D. (1964-1983)	Professor of Art
Geba, Bruno Hans, Ph.D. (1975-1992)	Professor of Recreation, Parks and Tourism	Hill, Jr., Richard B., Ph.D. (1969-1999)	Assistant Professor of Sociology, Imperial Valley Campus
Gefter, Irving, Ph.D. (1970-1992)	Assistant Professor of Religious Studies	Hill, Wayne O., Ed.D. (1955-1983)	Professor of Elementary Education
Gega, Peter C., Ed.D. (1955-1987)	Professor of Teacher Education	Hillix, William A., Ph.D. (1963-1992, except 1967-1969)	Professor of Psychology
Genzlinger, Cleve K., M.M. (1957-1991)	Professor of Music	Hines, Jeanette D., D.N.S. (1977-1991)	Associate Professor of Nursing
Ghilbert, Jeanne S., M.A. (1965-1982)	Assistant Professor of French	Hippaka, William H., Jur.D. (1957-1990)	Professor of Finance
Gibson, E. Dana, Ph.D. (1947-1971)	Professor of Information Systems	Ho, Hung-Ta, Ph.D. (1966-1991)	Professor of Mathematical Sciences
Gifford, Adam, Ph.D. (1954-1989)	Professor of Economics	Hobbs, John A., Ph.D. (1964-1998)	Associate Professor of Political Science
Gillette, Thomas L., Ph.D. (1961-1989)	Professor of Sociology	Hodge, Stanley B., M.A. (1968-1981)	Associate Professor of Art
Gindler, Herbert A., Ph.D. (1960-1992)	Professor of Mathematical Sciences	Hogg, Merle E., Ph.D. (1962-1992)	Professor of Music
Glasgow, Janis M., Ph.D. (1962-1994)	Professor of French	Holmes, Calvin V., Ph.D. (1956-1992)	Professor of Mathematical Sciences
Goldkind, Victor, Ph.D. (1961-1992)	Professor of Anthropology	Holowach, Frank S., M.A. (1960-1986)	Professor of Journalism
Goodson, Roger A., Ed.D. (1968-1988)	Professor of Teacher Education	Hoover, Grace V., B.S.L.S. (1956-1981)	Associate Librarian
Goodwin, Joann P., M.L.S. (1968-1991)	Senior Assistant Librarian	Hopkins, Jack R., M.F.A. (1961-1986)	Professor of Art
Granrud, Carolyn A., B.S.L.S. (1960-1987)	Senior Assistant Librarian	Hopkins, Ronald H., Ph.D. (1991-1998)	Vice President for Academic Affairs; Professor of Psychology
Grawunder, Ralph M., Ed.D. (1955-1991)	Professor of Physical Education	Hostetler, David K., Ed.D. (1966-1982)	Counselor
Gray, Robert T., Ed.D. (1956-1987)	Professor of Teacher Education	Howard, Edgar J., Ph.D. (1966-1997)	Professor of Mathematical and Computer Sciences
Greene, Joanne H., M.S.L.S., M.A. (1967-1986)	Catalog Librarian	Howard, Gordon S., Ph.D. (1968-1983)	Professor of Drama
Greenwood, Ned H., Ph.D. (1964-1995)	Professor of Geography	Howard, Raymond C., Ed.D. (1974-1989)	Associate Professor of Counselor Education
Griffin, Herschel E., M.D. (1980-1987)	Professor of Public Health	Howard, Roy J., Ph.D. (1963-1988)	Professor of Philosophy
Gripp, Richard C., Ph.D. (1958-1985)	Professor of Political Science	Hoyt, Jack W., Ph.D. (1981-1992)	Professor of Mechanical Engineering
Groff, Patrick J., Ed.D. (1955-1981)	Professor of Elementary Education	Huffman, Edward W., Ph.D. (1955-1980)	Professor of Zoology
Gross, George C., Ph.D. (1961-1985)	Professor of English and Comparative Literature	Huls, Harry E., Ph.D. (1961-1983)	Professor of Elementary Education
Grossberg, John M., Ph.D. (1962-1995)	Professor of Psychology	Hungate, Robert P., Ph.D. (1961-1987, except 1965-1969)	Professor of Finance
Grubbs, Edward J., Ph.D. (1961-1997)	Professor of Chemistry	Hunrichs, William A., Ph.D. (1957-1985)	Professor of Psychology
Guidry, Rosalind, Ph.D. (1970-1989)	Associate Professor of Social Work	Hunsaker, II, Don, Ph.D. (1960-1996)	Professor of Biology
Gulino, Claire, Ed.D. (1982-1991)	Professor of Nursing	Hunter, Lawrence B., M.A. (1963-1989)	Professor of Art
Gunning, Barbara A., Ph.D. (1969-1988)	Professor of Family Studies and Consumer Sciences	Hutchins, Robert C., D.B.A. (1968-1998)	Professor of Finance
Gutowski, Jr., Julius P., A.B. (1967-1991)	Assistant Professor of Physical Education	Hutchinson, George, Ph.D. (1973-1994)	Associate Professor of Recreation, Parks and Tourism
Haas, Robert W., Ph.D. (1967-1997)	Professor of Marketing	Ingham, Muriel B., Ph.D. (1967-1981)	Professor of English
Hale, E. Alan, Ph.D. (1957-1987)	Professor of Marketing	Inskeep, Jr., James E., Ph.D. (1960-1990)	Professor of Teacher Education
Hammer, Gerald K., Ed.D. (1963-1992)	Professor of Industrial Technology	Irgang, Frank J., Ph.D. (1956-1982)	Professor of Industrial Studies
Hanchett, William F., Ph.D. (1956-1987)	Professor of History	Isensee, Robert W., Ph.D. (1948-1982)	Professor of Chemistry
Hanson, Robert F., Rec.D. (1962-1983)	Professor of Recreation	Ishikawa, Wesley H., D.S.W. (1969-1988)	Professor of Social Work
Harari, Herbert, Ph.D. (1966-1987)	Professor of Psychology	Jackson, Elizabeth R., Doctorat (1969-1986)	Professor of French
Harder, Donald F., Ed.D. (1960-1983)	Counselor, Counseling Services	Jameson, K. Charles, Ph.D. (1965-1995)	Professor of Communication
Harmon, James E., Ph.D. (1964-1981)	Associate Professor of Political Science, Imperial Valley Campus	Janssen, Henry L., Ph.D. (1953-1988)	Professor of Political Science
		Jencks, Clinton E., Ph.D. (1964-1986)	Professor of Economics
		Jensen, Reilly C., Ph.D. (1958-1992)	Professor of Chemistry

Jiménez-Vera, Arturo, Ph.D. (1970-1992)	<i>Professor of Spanish</i>	Learned, Vincent R., Ph.D. (1968-1981)	<i>Professor of Electrical and Computer Engineering</i>
Johns, Gerald E., M.S.L.S. (1967-1986)	<i>Associate Librarian</i>	Leasure, J. William, Ph.D. (1962-1992)	<i>Professor of Economics</i>
Johnson, Albert W., Ph.D. (1964-1991)	<i>Vice President for Academic Affairs; Professor of Biology</i>	Lebherz, Herbert G., Ph.D. (1976-1996)	<i>Professor of Chemistry</i>
Johnson, C. Dale, Ph.D. (1963-1986)	<i>Professor of Sociology</i>	Leckart, Bruce T., Ph.D. (1968-1993)	<i>Professor of Psychology</i>
Johnson, Philip E., M.S.C.E. (1958-1987)	<i>Professor of Civil Engineering</i>	Lee, Raymond, Ph.D. (1977-1992)	<i>Associate Professor of Psychology</i>
Johnson, Warren A., Ph.D. (1969-1997)	<i>Professor of Geography</i>	Lee, Robert E., M.A. (1956-1983)	<i>Professor of Telecommunications and Film</i>
Jones, Jr., Kenneth K., M.A. (1948-1983)	<i>Professor of Telecommunications and Film</i>	Leerhoff, Ruth E., M.A. (1964-1991)	<i>Librarian</i>
Jones, Walter D., Ph.D. (1962-1991)	<i>Professor of Chemistry</i>	Leiffer, Donald B., Ph.D. (1948-1971)	<i>Professor of Public Administration and Urban Studies</i>
Jordan, Jr., G. Ray, Ph.D. (1966-1987)	<i>Professor of Religious Studies</i>	Lemus, George, Ph.D. (1960-1991)	<i>Professor of Spanish</i>
Joseph, Lionel, Ph.D. (1947-1971)	<i>Professor of Chemistry</i>	Leslie, Norman C., M.N. (1969-1988)	<i>Assistant Professor of Nursing</i>
Kaatz, James M., Ed.D. (1967-1992)	<i>Associate Professor of Teacher Education</i>	Levine, Joseph R., Ph.D. (1965-1995)	<i>Professor of Psychology</i>
Kahn, Marion J., M.S. (1967-1983)	<i>Professor of Social Work</i>	Lienert, Charles, Ed.D. (1954-1977)	<i>Professor of Educational Administration</i>
Kahng, Tae Jin, Ph.D. (1962-1994)	<i>Professor of Political Science</i>	Lindgren, Donald A., Ph.D. (1965-1992)	<i>Professor of Marketing</i>
Karen, Robert L., Ph.D. (1964-1985)	<i>Professor of Psychology</i>	Little, D. Richard, Ph.D. (1974-1995)	<i>Professor of Political Science</i>
Kasch, Frederick W., Ed.D. (1948-1981)	<i>Professor of Physical Education</i>	Lodge, Chester R., Ph.D. (1954-1988)	<i>Professor of Electrical and Computer Engineering</i>
Kass, Norman, Ph.D. (1961-1997)	<i>Professor of Psychology</i>	Longenecker, Martha, M.F.A. (1955-1981)	<i>Professor of Art</i>
Keen, Elmer A., Ph.D. (1967-1989)	<i>Professor of Geography</i>	Loomis, David M., M.M. (1961-1983)	<i>Associate Professor of Music</i>
Kelley, Joseph B., D.S.W. (Under contract 1968-1969; 1970-1998)	<i>Professor of Social Work</i>	Lybarger, Alvin E., Ed.D. (1970-1992)	<i>Associate Professor of Mechanical Engineering</i>
Kelly, Beatrice L., Ph.D. (1967-1983)	<i>Professor of Microbiology</i>	Lynn, Elizabeth, Ph.D. (1963-1988)	<i>Associate Professor of Psychology</i>
Kendall, W. Lloyd, Ed.D. (1961-1992)	<i>Professor of Teacher Education</i>	MacDonald, Gretchen, Ph.D. (1966-1981)	<i>Associate Professor of Study Skills</i>
Kern, J. Philip, Ph.D. (1968-1994)	<i>Professor of Geological Sciences</i>	Macky, David W., Ph.D. (1969-1998)	<i>Associate Professor of Mathematical and Computer Sciences</i>
Kessler, Lois P., M.A. (1969-1990)	<i>Associate Professor of Health Science</i>	Madsen, Roy P., Ph.D. (1966-1991)	<i>Professor of Telecommunications and Film</i>
Khalil, Issa J., Ph.D. (1969-1992)	<i>Associate Professor of Religious Studies</i>	Malcolm, David D., Ph.D. (1953-1983)	<i>Professor of Counselor Education</i>
Kiewiet De Jonge, Engbert J. C., Ph.D. (1963-1983)	<i>Professor of Geography</i>	Malik, Jim G., Ph.D. (1957-1992)	<i>Professor of Chemistry</i>
King, Bonnie B., M.A. (1970-1984)	<i>Assistant Professor of English, Imperial Valley Campus</i>	Manjos, Thelma D., Ph.D. (1969-1975)	<i>Professor of Counselor Education</i>
King, Harry A., Ph.D. (1978-1997)	<i>Professor of Exercise and Nutritional Sciences</i>	Mann, Richard L., M.S.E.E. (1968-1982)	<i>Professor of Electrical and Computer Engineering</i>
Kinsey, Margaret E., M.A. (1961-1972)	<i>Circulation Librarian</i>	Mansfield, Jr., George A., M.S.M.E., Professional Degree in Mechanical Engineering (1968-1994)	<i>Professor of Mechanical Engineering</i>
Kitchen, James D., Ph.D. (1957-1981)	<i>Professor of Public Administration and Urban Studies</i>	Marcus, Bernard, Ph.D. (1966-1996)	<i>Associate Professor of Mathematical Sciences</i>
Kitzinger, Angela M., Ph.D. (1945-1969)	<i>Professor of Health Science and Safety</i>	Marosz, Wanda A., M.A. (1967-1986)	<i>Associate Professor of Mathematical Sciences</i>
Klann, Corinne F., M.A. (1962-1983)	<i>Assistant Professor of Elementary Education</i>	Marshak, Celia L., Ph.D. (1973-1993)	<i>Assistant Dean for Student Affairs, College of Sciences</i>
Kochanski, Adrian J., Ph.D. (1969-1983)	<i>Professor of Public Administration and Urban Studies</i>	Marsters, Harold L., M.A. (1962-1992)	<i>Associate Professor of Industrial Technology</i>
Kohler, Richard C., Ph.D. (1969-1988)	<i>Professor of English and Comparative Literature</i>	Martin, Joan L., Ed.D. (1970-1992)	<i>Professor of Family Studies and Consumer Sciences</i>
Kopp, Harriet G., Ph.D. (1970-1983)	<i>Professor of Communicative Disorders</i>	Martin, Mary F., M.S. (1958-1980)	<i>Assistant Professor of Family Studies and Consumer Sciences</i>
Koppman, Jerry W., Ph.D. (1963-1987)	<i>Professor of Psychology</i>	Martinez, Julio A., Ph.D. (1973-1992)	<i>Associate Librarian</i>
Krummenacher, Daniel, Ph.D. (1968-1988)	<i>Professor of Geological Sciences</i>	Massey, Gail A., Ph.D. (1981-1997)	<i>Professor of Electrical and Computer Engineering</i>
Kukkonen, Ruth M., M.S.W. (1973-1989)	<i>Professor of Social Work</i>	Mathewson, James H., Ph.D. (1964-1992)	<i>Professor of Chemistry</i>
Kummerow, Jochen, Ph.D., nat. (1973-1990)	<i>Professor of Biology</i>	Max, Stefan L., Ph.D. (1964-1984)	<i>Professor of French</i>
Kuznets, Lois R., Ph.D. (1985-1996)	<i>Professor of English</i>	May, Thomas L., Ph.D. (1971-1998)	<i>Associate Professor of Astronomy</i>
Laiho, Ethel E., M.S. (1964-1982)	<i>Associate Professor of Nursing</i>	McAdams, Henry E., Ph.D. (1966-1992)	<i>Director, University Advising Center; Counselor</i>
Lamb, Alma S., B.S. (1962-1988)	<i>Assistant Librarian</i>	McAllister, R. Wayne, M.A. (1966-1983)	<i>Assistant Professor of Educational Technology and Librarianship</i>
Lambert, Arthur A., Ph.D. (1960-1983)	<i>Professor of Music</i>	McAmis, Lessley C., B.A. (1959-1971)	<i>Documents Librarian</i>
LaMonica, Grace, M.S. (1966-1992)	<i>Assistant Professor of Nursing</i>	McBlair, William, Ph.D. (1948-1982)	<i>Professor of Biology</i>
Landis, Jean, M.S. (1968-1979)	<i>Assistant Professor of Physical Education</i>	McClard, Q. Donavon, Ph.D. (1966-1986)	<i>Professor of Special Education</i>
Landis, Vincent J., Ph.D. (1954-1997)	<i>Professor of Chemistry</i>	McClurg, Jack, Ph.D. (1962-1991)	<i>Professor of Philosophy</i>
Langenbach, Robert G., Ed.D. (1959-1981)	<i>Professor of Information Systems</i>	McCoy, Leone D., Ph.D. (1967-1990)	<i>Professor of Teacher Education</i>
Lantz, John M., Ph.D. (1986-1998)	<i>Professor of Nursing</i>		
LaPray, Margaret H., Ph.D. (1969-1977)	<i>Professor of Elementary Education</i>		
Lawson, Richard H., Ph.D. (1957-1984, except 1976-1984)	<i>Professor of German</i>		

Emeritus Faculty

McDonald, Roy D., Ph.D. (1963-1992)	<i>Professor of Psychology</i>	Noorany, Iraj, Ph.D., Professional Degree in Civil Engineering (1963-1997)	<i>Professor of Civil and Environmental Engineering</i>
McEowen, R. Harold, Ph.D. (1967-1992)	<i>Associate Professor of Industrial Technology</i>	Norland, Calvert E., M.S. (1947-1976)	<i>Professor of Zoology</i>
McEuen, Robert B., Ph.D. (1969-1979)	<i>Professor of Geological Sciences</i>	Norman, Nelson F., Ph.D. (1960-1983)	<i>Professor of History</i>
McFall, John B., Ph.D. (1966-1985)	<i>Professor of Marketing</i>	Nower, Leon, Ph.D. (1963-1990)	<i>Associate Professor of Mathematical Sciences</i>
McGhie, Robert D., Ph.D., Professional Degree in Mechanical Engineering (1967-1997)	<i>Professor of Civil and Environmental Engineering</i>	Nye, William A., Ph.D. (1962-1996)	<i>Professor of Finance</i>
McLean, Jr., Norman, Ph.D. (1965-1991)	<i>Professor of Biology</i>	O'Brien, Bob R., Ph.D. (1966-1995)	<i>Professor of Geography</i>
McLeod, Dan, Ph.D. (1964-1993)	<i>Professor of English and Comparative Literature</i>	O'Day, Edward F., Ph.D. (1957-1986)	<i>Professor of Psychology</i>
McLoney, Wirt, Ed.D. (1949-1974)	<i>Professor of Industrial Studies</i>	Odendahl, Eric M., Ph.D. (1964-1992)	<i>Professor of Journalism</i>
McTaggart, Aubrey C., Ph.D. (1962-1992)	<i>Professor of Health Science</i>	Oglesby, Allan C., M.D. (1984-1990)	<i>Professor of Public Health</i>
Meek, Doris A., Ed.D. (1968-1981)	<i>Professor of Secondary Education</i>	Ohnysty, Basil, M.S., Professional Degree in Mechanical Engineering (1967-1997)	<i>Professor of Mechanical Engineering</i>
Mehaffy, George L., Ph.D. (1986-1994)	<i>Professor of Teacher Education</i>	Olsen, Lyle I., Ed.D. (1961-1989)	<i>Professor of Physical Education</i>
Meier, Robert A., Ph.D. (1972-1986)	<i>Professor of Accountancy</i>	Olson, Jr., Andrew C., Ph.D. (1946-1980)	<i>Professor of Zoology</i>
Meigs, Robert F., Ph.D. (1972-1996)	<i>Professor of Accountancy</i>	O'Neal, H. Edward, Ph.D. (1961-1994)	<i>Professor of Chemistry</i>
Merzbacher, Claude F., Ed.D. (1947-1978)	<i>Professor of Natural Science</i>	O'Reilly, Nathalia Crane, Special Study at Barnard College, University of Madrid, and Sorbonne (1958-1983)	<i>Assistant Professor of English and Comparative Literature</i>
Miles, E. Walter, Ph.D. (1966-1998)	<i>Professor of Political Science</i>	O'Reilly, Peter, Ph.D. (1968-1983)	<i>Professor of Philosophy</i>
Miller, Ralph Llewellyn, Ph.D. (1963-1996)	<i>Professor of Counseling and School Psychology</i>	Padgett, L. Vincent, Ph.D. (1956-1992)	<i>Professor of Political Science</i>
Milne, David S., Ph.D. (1946-1976)	<i>Professor of Sociology</i>	Palmer, Dennis, A.B. (1965-1997)	<i>Associate Professor of French</i>
Milne, Thair S., M.A. (1968-1979)	<i>Associate Professor of Family Studies and Consumer Sciences</i>	Parsons, John A., Ph.D. (1965-1990)	<i>Professor of Biology</i>
Mitton, Daryl G., Ph.D. (1966-1991)	<i>Professor of Management</i>	Paulin, Harry W., Ph.D. (1962-1991)	<i>Professor of German</i>
Moaney, Eric R., M.F.A., M.S. (1968-1998)	<i>Assistant Professor of Art</i>	Pease, William J., M.A., M.L.S. (1973-1992)	<i>Librarian</i>
Moe, Chesney R., Ph.D. (1931-1972)	<i>Professor of Physics</i>	Pehrson, Robert B., Ph.D. (1969-1996)	<i>Professor of Teacher Education</i>
Moe, Jean T., M.A. (1966-1983)	<i>Associate Professor of Music</i>	Peisner, Earl F., Ed.D. (1961-1990)	<i>Counselor; Professor of Counselor Education</i>
Moffett, Myrna J., Ph.D. (1968-1998)	<i>Assistant Professor of Nursing</i>	Penn, Robert, Ph.D. (1960-1991)	<i>Professor of Psychology</i>
Monroe, Ronald E., Ph.D. (1973-1997)	<i>Professor of Biology</i>	Perczel, Csilla F., Ph.D. (1970-1990)	<i>Associate Professor of Art</i>
Monteverde, John P., Ph.D. (1954-1986)	<i>Professor of English and Comparative Literature</i>	Perkins, William A., Ph.D. (1955-1984)	<i>Professor of English and Comparative Literature</i>
Moore, Harold B., Ph.D. (1960-1991)	<i>Professor of Biology</i>	Person, Gerald A., Ph.D. (1957-1981)	<i>Professor of Secondary Education</i>
Moreno, Steve G., Ed.D. (1969-1998)	<i>Professor of Teacher Education</i>	Peterson, Donald W., Ph.D. (1974-1992)	<i>Associate Professor of Recreation, Parks and Tourism</i>
Morgan, Charles, M.S. (1949-1985)	<i>Professor of Mechanical Engineering</i>	Peterson, Richard H., Ph.D. (1978-1996)	<i>Professor of History</i>
Moser, Joseph M., Ph.D. (1959-1998)	<i>Professor of Mathematical and Computer Sciences</i>	Phelps, Leroy N., Ph.D. (1966-1990)	<i>Associate Professor of Biology</i>
Mouratides, Nicos N., Ph.D. (1960-1992)	<i>Professor of Sociology</i>	Phillips, Jr., William H., Ed.D. (1963-1991)	<i>Professor of Physical Education</i>
Mracek, Jaroslav J.S., Ph.D. (1965-1991)	<i>Professor of Music</i>	Pierson, Albert Chad, Ph.D. (1954-1983)	<i>Professor of Management</i>
Munter, Robert L., Ph.D. (1964-1991)	<i>Professor of History</i>	Pincetti, Jr., Stanley J., Ph.D. (1955-1986)	<i>Professor of History</i>
Murdock, Doris G., B.S.L.S. (1960-1972)	<i>Catalog Librarian</i>	Platz, Marvin H., Ed.D. (1955-1983)	<i>Professor of Secondary Education</i>
Murphy, Monica A., Ph.D. (1969-1992)	<i>Professor of Teacher Education</i>	Plymale, Harry H., D.V.M. (1962-1991)	<i>Associate Professor of Biology</i>
Murphy, Robert J., Ph.D., Professional Degree in Mechanical Engineering (1964-1996)	<i>Professor of Mechanical Engineering</i>	Poroy, Ibrahim I., Ph.D. (1967-1987)	<i>Professor of Economics</i>
Nagel, Thomas S., Ph.D. (1969-1995)	<i>Professor of Teacher Education</i>	Posner, Walter H., M.A., M.A.L.S. (1962-1988)	<i>Senior Assistant Librarian</i>
Nam, Woo Hyun, Ph.D. (1968-1998)	<i>Professor of Economics</i>	Pritchard, David C., Ph.D. (1978-1996)	<i>Associate Professor of Social Work</i>
Neel, James W., Ph.D. (1963-1993)	<i>Associate Dean, College of Sciences; Professor of Biology</i>	Prouty, Helen L., Ph.D. (1950-1976)	<i>Professor of Secondary Education</i>
Nelson, Burt, Ph.D. (1957-1988)	<i>Director of the Mt. Laguna Observatory; Professor of Astronomy</i>	Psomas, Themistocles, Ph.D. (1952-1982)	<i>Associate Professor of Psychology</i>
Nelson, Hilda B., Ph.D. (1965-1988)	<i>Professor of French</i>	Placek, Anton D., Ph.D. (1965-1992)	<i>Associate Professor of Geological Sciences</i>
Nelson, Sherwood M., Ph.D. (1956-1982)	<i>Professor of Philosophy</i>	Quiett, Fredrick T., M.S., J.D. (1957-1981)	<i>Professor of Civil Engineering</i>
Nesvig, David T., Ed.D. (1967-1997)	<i>Counselor</i>	Rader, Daniel L., Ph.D. (1954-1983)	<i>Professor of History</i>
Neuman, Donald R., Ph.D. (1967-1991)	<i>Counselor</i>	Ramage, Jean C., Ph.D. (1975-1989)	<i>Professor of Counselor Education</i>
Neumeyer, Peter F., Ph.D. (1978-1993)	<i>Professor of English and Comparative Literature</i>	Rankin, Janna S., J.D. (1986-1994)	<i>Professor of Recreation, Parks and Tourism</i>
Neuner, Jr., Edward J., Ph.D. (1957-1986)	<i>Professor of Economics</i>	Rao, M. V. Rama, Ph.D. (1957-1982)	<i>Professor of Mechanical Engineering</i>
Neyndorff, Hans, Doctorandus (1962-1983)	<i>Senior Assistant Librarian</i>	Rasmussen, Aaron P., Ph.D. (1971-1980)	<i>Associate Professor of Industrial Studies</i>
Nichols, Paul F., Ph.D. (1965-1992)	<i>Professor of Physics</i>	Ratty, Frank J., Ph.D. (1954-1984)	<i>Professor of Biology</i>
		Ray, Eugene A., M.F.A. (1969-1996)	<i>Professor of Art</i>

Raymer, Paul H., M.S.W. (Under contract 1969-70; 1970-1995) Assistant Professor of Social Work	Schmier, Walter D., J.D. (1967-1975) Associate Professor of Business Law
Redding, Mary Worden, Ph.D. (1967-1983) Associate Professor of English and Comparative Literature	Schulze, Rolf H.K., Ph.D. (1969-1998) Professor of Sociology
Redding, Robert W., Ph.D. (1966-1985) Associate Professor of English and Comparative Literature	Schwob, Marion L., M.S. (1934-1960) Associate Professor of Physical Education
Reel, Jane E., Ph.D. (1958-1991) Associate Professor of Teacher Education	Scutchfield, F. Douglas, M.D. (1980-1997) Professor of Public Health
Reichert, Kurt, Ph.D. (1970-1981) Professor of Social Work	Sebold, Frederick D., Ph.D. (1969-1987) Professor of Economics
Reints, William W., Ph.D. (1966-1992) Professor of Finance	Segal, Evalyn F., Ph.D. (1973-1983) Professor of Psychology
Retson, James N., Ed.D. (1968-1992) Professor of Teacher Education	Sender, Florence H., M.A. (1964-1973) Associate Professor of Spanish
Richardson, William H., Ph.D. (1963-1994) Professor of Chemistry	Seright, Orin D., Ph.D. (1967-1997) Associate Professor of Linguistics
Riedman, Richard M., Ph.D. (1962-1992) Professor of Communicative Disorders	Settle, Robert B., Ph.D. (1972-1988) Professor of Marketing
Riehman, Lynne, D.S.W. (1976-1986) Associate Professor of Social Work	Sheldon, John M., Ed.D. (1962-1997) Professor of Music
Riggs, Dorothy J., Ed.D. (1966-1986) Professor of Teacher Education	Shepard, David C., Ph.D. (1956-1991) Professor of Biology
Riggs, Lester G., Ph.D. (1950-1978, except 1951-1952) Professor of Mathematical Sciences	Shields, Allan E., Ph.D. (1949-1977, except 1969-1970) Professor of Philosophy
Rinehart, Robert R., Ph.D. (1964-1994) Professor of Biology	Shimoguchi, Wayne M., M.L.I.S. (1988-1995) Senior Assistant Librarian
Ring, Morey A., Ph.D. (1962-1995) Professor of Chemistry	Shira, Jr., Donald W., M.A.L.S. (1958-1986) Senior Assistant Librarian
Rixman, Eunice E., D.M.A. (1960-1991) Professor of Teacher Education	Shull, Jr., Charles M., Ph.D. (1969-1983) Professor of Natural Science
Robbins, Stephen P., Ph.D. (1979-1993) Professor of Management	Shutts, William H., Ph.D. (1958-1977) Professor of Aerospace Engineering
Roberts, Ellis E., Ph.D. (1949-1979) Professor of Geological Sciences	Singer, Jr., Arthur, Ph.D. (1959-1983) Professor of Special Education
Rodney, Joseph A., Ed.D. (1957-1976) Dean, Imperial Valley Campus; Professor of Education	Skaar, Donald L., M.S. (1960-1981) Professor of Electrical and Computer Engineering
Rogers, John J., M.S. (1963-1996) Professor of Art	Sleet, David A., Ph.D. (1974-1997) Professor of Exercise and Nutritional Sciences and Health Science
Rogers, Spencer L., Ph.D. (1930-1971) Professor of Anthropology	Sloan, William C., Ph.D. (1961-1990) Professor of Biology
Rohfleisch, Kramer, Ph.D. (1947-1974) Professor of History	Smith, Beverly A., M.S. (1968-1996) Assistant Professor of Exercise and Nutritional Sciences
Rohfleisch, Marjorie C., M.A. (1966-1975) Associate Professor of Music	Smith, Jr., Charles D., Ph.D. (1967-1992) Professor of History
Rollefson, Gary O., Ph.D. (1984-1992) Professor of Anthropology	Smith, Deane F., M.Mus. (1939-1970) Associate Professor of Music
Romano, Albert, Ph.D. (1963-1990) Professor of Mathematical Sciences	Smith, John R., Ph.D. (1957-1986) Associate Professor of Psychology
Rosenbaum, Gerald, Ph.D. (1989-1994) Professor of Psychology	Smith, Jr., Louis E., Ph.D. (1946-1979) Professor of Physics
Ross, Helen Warren, Ph.D. (1973-1998) Professor of Child and Family Development	Smith, Newton B., Ph.D. (1954-1986) Professor of Mathematical Sciences
Ross, Ramon R., Ed.D. (1961-1992) Professor of Teacher Education	Smith, Jr., Ray T., Ph.D. (1964-1996) Professor of History
Rost, Norman, M.M. (1951-1977) Professor of Music	Smith, Jr., Robert D., Ph.D. (1963-1994) Professor of Teacher Education
Rowland, Monroe K., Ph.D. (1960-1992) Professor of Teacher Education	Snider, Mervin S., M.A. (1953-1983) Professor of Music
Ruja, Harry, Ph.D. (1947-1979) Professor of Philosophy	Snudden, Leslie W., D.B.A. (1959-1987) Professor of Accountancy
Saltz, Daniel, Ph.D. (1959-1995) Professor of Mathematical Sciences	Snyder, William S., Ph.D. (1960-1990) Professor of Philosophy
Sandelin, Mary Lee, M.L.S. (1968-1983) Senior Assistant Librarian	Somerville, Rose M., Ed.D. (1967-1977) Professor of Family Studies and Consumer Sciences and Sociology
Sanderlin, George W., Ph.D. (1954-1983) Professor of English and Comparative Literature	Sonntag, Iliana L., M.L.S., M.A. (1980-1991) Librarian
Sanders, Frederick C., Ph.D. (1967-1981) Associate Professor of Speech Communication	Sorensen, George W., Ph.D. (1967-1986) Professor of Journalism and Sociology
Sandlin, Joann S., Ph.D. (1967-1994) Professor of Sociology	Sorenson, George N., M.A. (1946-1976) Professor of Art
Sandstrom, Glenn A., Ph.D. (1956-1983) Professor of English and Comparative Literature	Sorochan, Walter D., H.S.D. (1969-1991) Professor of Health Science
Sanner, Richard L., Ed.D. (1965-1981) Media Specialist	Spangler, John A., Ph.D. (1946-1981) Professor of Chemistry
Santangelo, Gennaro A., Ph.D. (1967-1992) Professor of English and Comparative Literature	Spaulding, Jr., William E., Ph.D. (1970-1985) Professor of Information Systems
Sardinas, Maria A., M.T., M.S.W. (1968-1989) Associate Professor of Social Work	Spencer, Marjorie J., M.A. (1969-1978) Associate Professor of Art, Imperial Valley Campus
Sattler, Jerome M., Ph.D. (1965-1994) Professor of Psychology	Srbich, Alexander L., Ph.D. (1959-1983) Professor of Management
Schalles, Frances I., A.B. (1950-1968) Education and Curriculum Materials Librarian	Stautland, Sigurd, Ph.D. (1966-1991) Professor of Teacher Education
Schapiro, Harriette C., Ph.D. (1966-1990) Professor of Biology	Steckbauer, Mark J., Ed.D. (1967-1992) Professor of Teacher Education
Schatz, Arthur W., Ph.D. (1963-1992) Assistant Dean, Graduate Division and Research; Professor of History	Steele, Richard W., Ph.D. (1967-1996) Professor of History
Schlesinger, Robert J., Ph.D. (1984-1997) Professor of Information and Decision Systems	Steen, Paul J., M.A. (1970-1992) Professor of Telecommunications and Film; Director of University Telecommunications
Schmidt, Mary Gwynne, Ph.D. (1978-1991) Professor of Social Work	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) Professor of Sociology
	Stevens, Larry P., Ed.D. (1986-1991) Assistant Professor of Administration, Rehabilitation and Postsecondary Education

Emeritus Faculty

Stevens, Walter R., Ph.D. (1956-1990)	<i>Professor of Psychology</i>	Veneris, Yiannis P., Ph.D. (1967-1998)	<i>Professor of Economics</i>
Stewart, Charles J., Ph.D. (1955-1992)	<i>Professor of Chemistry</i>	Verderber, Anne, Ph.D. (1971-1992)	<i>Associate Professor of Nursing</i>
Stiehl, Harry C., Ph.D. (1969-1992)	<i>Professor of English</i>	Vergani, GianAngelo, Dottorato in Lettere (1963-1992)	<i>Professor of Italian</i>
Stoddart, Jess L., Ph.D. (1966-1998)	<i>Professor of History</i>	Vergani, Luisa M., Dottorato in Lettere (1969-1983)	<i>Professor of Italian</i>
Stone, Hamilton L., B.S. (1947-1971)	<i>Associate Professor of Mechanical Engineering</i>	Villone, Arnold L., Ph.D. (1968-1998)	<i>Professor of Mathematical and Computer Sciences</i>
Stone, Sanford H., M.S.E., M.S. (1956-1990)	<i>Professor of Civil Engineering</i>	Wadsworth, Jr., Earl P., Ph.D. (1956-1990)	<i>Professor of Chemistry</i>
Storm, Alvena S., M.A. (1926-1966)	<i>Professor of Geography</i>	Walba, Harold, Ph.D. (1949-1986)	<i>Professor of Chemistry</i>
Stough, Morrow F., Ph.D. (1950-1976, except 1966-1971)	<i>Professor of Education</i>	Walch, Jr., Henry A., Ph.D. (1955-1985)	<i>Professor of Biology</i>
Stout, Zoe E., Ph.D. (1965-1977)	<i>Associate Professor of Family Studies and Consumer Sciences</i>	Wallace, Robert D., Litt. D. (1957-1986)	<i>Professor of Art</i>
Strand, Marguerite R., Ph.D. (1955-1977)	<i>Counselor, Professor of Secondary Education</i>	Warburton, John T., Ed.D. (1968-1982)	<i>Associate Professor of Educational Administration</i>
Stratton, Frank E., Ph.D., Professional Degree in Civil Engineering (1966-1997)	<i>Professor of Civil and Environmental Engineering</i>	Warren, Edward W., Ph.D. (1963-1990)	<i>Professor of Philosophy and Classics</i>
Straub, Lura Lynn, M.C.S. (1948-1978)	<i>Professor of Information Systems</i>	Watson, Lawrence C., Ph.D. (1967-1992)	<i>Professor of Anthropology</i>
Strong, Douglas H., Ph.D. (1964-1990)	<i>Professor of History</i>	Webb, Charles R., Ph.D. (1949-1972, except 1965)	<i>Professor of History</i>
Stuart, Robert J., Ph.D. (1969-1987)	<i>Professor of Electrical and Computer Engineering</i>	Wedberg, Hale L., Ph.D. (1959-1983)	<i>Professor of Botany</i>
Sullivan, Edward D. S., Ph.D. (1967-1983)	<i>Assistant Professor of English and Comparative Literature</i>	Weeter, Raymond D., Ph.D. (1966-1991)	<i>Associate Professor of Spanish</i>
Szabo, Andrew, Ph.D. (1955-1978)	<i>Collection Development Librarian</i>	Weissman, Stanley N., Ph.D. (1962-1991)	<i>Professor of Philosophy</i>
Talamantes, Florence W., Ph.D. (1962-1992)	<i>Associate Professor of Spanish</i>	Wells, Richard W., M.A. (1961-1994)	<i>Associate Professor of Physical Education</i>
Tanzer, JoAnn L., Ed.D. (1956-1986)	<i>Professor of Art</i>	Wendling, Aubrey, Ph.D. (1954-1982)	<i>Professor of Sociology</i>
Taylor, Jr., Hawley C., Ph.D. (1964-1990)	<i>Associate Professor of English and Comparative Literature</i>	Werner, Joan T., Ph.D. (1965-1998)	<i>Associate Professor of Sociology</i>
Taylor, James W., Ph.D. (1950-1980)	<i>Professor of Geography</i>	West, John J., M.S. (1969-1989)	<i>Senior Assistant Librarian</i>
Taylor, Kenneth M., Ph.D. (1949-1978)	<i>Professor of Biology</i>	Wetherill, William H., Ph.D. (1957-1982)	<i>Professor of Educational Administration</i>
Teasdale, John G., Ph.D. (1956-1982)	<i>Professor of Physics</i>	Wheeler, James L., Ph.D. (1968-1999)	<i>Associate Professor of English and Comparative Literature</i>
Thiel, Edmund L., Ph.D. (1957-1986)	<i>Professor of Industrial Studies</i>	Whitby, Joan A., M.S. (1968-1998)	<i>Assistant Professor of Exercise and Nutritional Sciences</i>
Thile, Edmund L., Ph.D. (1967-1998)	<i>Professor of Communicative Disorders</i>	Whitney, Frederick C., Ph.D. (1970-1979)	<i>Associate Professor of Journalism</i>
Thomas, Beatrice A., M.A. (1954-1977)	<i>Professor of Nursing</i>	Widmer, Kingsley, Ph.D. (1956-1991)	<i>Professor of English and Comparative Literature</i>
Thompson, Willis H., M.A. (1967-1991)	<i>Assistant Professor of Natural Science</i>	Wilding, John H., Ed.D. (1960-1986)	<i>Professor of Teacher Education</i>
Threet, Richard L., Ph.D. (1961-1981)	<i>Professor of Geological Sciences</i>	Wilhelm, Betty Jane, M.A. (1961-1980)	<i>Assistant Professor of Physical Education</i>
Thwaites, William M., Ph.D. (1965-1995)	<i>Associate Professor of Biology</i>	Willerding, Margaret F., Ph.D. (1956-1976)	<i>Professor of Mathematics</i>
Tollefsen, Dorothy J., M.A. (1946-1972)	<i>Professor of Physical Education</i>	Williamson, Gloria R., M.A. (1961-1979)	<i>Associate Professor of Physical Education</i>
Tossas, Leila de Irizarry, Ed.D. (1961-1977)	<i>Professor of Elementary Education</i>	Wilson, Donald G., Ph.D. (1982-1992)	<i>Lecturer in Electrical and Computer Engineering</i>
Tozer, Lowell, Ph.D. (1954-1986)	<i>Professor of English and Comparative Literature</i>	Wilson, Wilfred J., Ph.D. (1963-1992)	<i>Professor of Biology</i>
Turner, Marjorie S., Ph.D. (1954-1977)	<i>Professor of Economics</i>	Witherspoon, John P., M.A. (1979-1992)	<i>Professor of Telecommunications and Film</i>
Turner, Merle B., Ph.D. (1950-1974)	<i>Professor of Psychology</i>	Wolter, Gerhard, M.S. (1957-1975)	<i>Professor of Physics</i>
Vails-Weber, Dorothy V., M.A. (1970-1998)	<i>Counselor</i>	Woo, Catherine Yi-yu Cho, Ed.D. (1970-1997)	<i>Professor of Chinese</i>
Valle, Juan Ramon, Ph.D. (1974-1996)	<i>Professor of Social Work</i>	Woodson, John H., Ph.D. (1961-1998)	<i>Professor of Chemistry</i>
Vanderbilt, Kermit, Ph.D. (1962-1988)	<i>Professor of English and Comparative Literature</i>	Wulbern, Julian H., Ph.D. (1966-1993)	<i>Professor of German</i>
Vanderwood, Paul J., Ph.D. (1969-1994)	<i>Professor of History</i>	Wylie, Donald G., Ph.D. (1966-1992)	<i>Professor of Telecommunications and Film</i>
Van de Wetering, R. Lee, Ph.D. (1960-1992)	<i>Professor of Mathematical Sciences</i>	Yahr, Charles C., Ph.D. (1955-1988)	<i>Professor of Geography</i>
Vanier, Dino T., Ph.D. (1970-1998)	<i>Professor of Marketing</i>	Yates, Charles D., M.A. (1970-1998)	<i>Professor of Music</i>
Van Steenberg, James F., Ph.D. (1970-1993)	<i>Professor of Biology</i>	Yesselman, Charlotte B., Ph.D. (1967-1988)	<i>Professor of Teacher Education</i>
Varela-Ibarra, José L., Ph.D. (1976-1991)	<i>Associate Professor of Spanish, Imperial Valley Campus</i>	Zedler, Joy B., Ph.D. (1972-1998)	<i>Professor of Biology</i>
		Zedler, Paul H., Ph.D. (1969-1998)	<i>Professor of Biology</i>
		Ziegenfuss, George, Ed.D. (1948-1980)	<i>Professor of Physical Education</i>

Part-Time Faculty 1998–1999

ARTS AND LETTERS

Allen, Marie-Line, M.A., French
Alonso-Sed, José, Ph.D., Spanish
Anderson, James T., M.A., Philosophy
Archer, Kraig P., M.A., Sociology
Arostegui, Maria Raquel, Ph.D., Spanish
Arzola, Enrique G., M.A., Spanish
Ascanio, Ruben, M.A., Spanish
Ashbaugh, William B., M.A., History
Bailey, Jutta F., M.A., German
Barnard, Ian, Ph.D., English
Barry, Nelly, M.A., Spanish
Beasley, Edward J., Ph.D., History
Becerra, David, M.A., Spanish
Bergstrom, Jr., George W., Ph.D., Political Science
Berteaux, John A., M.A., Philosophy
Bishawi, Walid Y., Ph.D., Economics
Boeck, Candace, M.A., M.B.A., Rhetoric and Writing Studies
Boni, Pat, Ph.D., Religious Studies
Brown, Nancy, M.A., Political Science
Bryson, Liane, M.A., Rhetoric and Writing Studies
Bush, Donald W., B.S., B.A., Rhetoric and Writing Studies
Butler, Evelyn A., Ph.D., English
Butler, Maria G., M.A., Chicana and Chicano Studies
Butler, Raymond J., M.A., Economics
Butler, Renate F., Ph.D., German
Byrne, Sheila, M.S., Arts and Letters, General
Cachu De La Cerda, Maria Dolores, M.B.A., Spanish
Calandra, Concetta, M.A., Spanish
Calvet, Darla A., M.A., Sociology
Cano, Humberto, M.A., Spanish
Carney, Jane R., Ph.D., Sociology
Carrico, Richard L., M.A., American Indian Studies
Castleman, Bruce A., Ph.D., History
Chagala, James C., Ph.D., Geography
Christenson, Lynne E., Ph.D., Anthropology
Chu, Andrea Wong, M.A., Linguistics
Clague, Christopher K., Ph.D., Economics
Clanton, Gordon, Ph.D., Sociology
Clarke, Janet T., M.A., Anthropology
Conway, Fred J., Ph.D., Anthropology
Coords, Rosa M., M.A., Spanish
Coto, Nancy M., M.A., Spanish
Crawford, Kathleen A., M.A., History
Cruz Piñeiro, Rodolfo, Ph.D., Sociology
Culbert, Janet E., M.A., Anthropology
Curry, James H., Ph.D., Chicana and Chicano Studies; Sociology
Davidson, Alexandria R., M.A., Economics
Davis, Clara I., M.A., Spanish
De La Parra, Maria Luisa, M.A., Spanish
Debchaudhury, Sudata, Ph.D., History
Dirige, Ofelia V., Dr.P.H., History
Dixon, Patricia A., M.A., American Indian Studies
Dobbins, James G., Ph.D., Arts and Letters, General
Donahue, G. Teresa, M.B.A., Spanish
Dudley, Cynthia L., M.A., Rhetoric and Writing Studies

Dünser-Medlock, Caroline, M.A., German
Eaton, Gerald G., Ph.D., Sociology
Ekizian, Alison E., M.A., Anthropology
Emery, Laura C., Ph.D., Rhetoric and Writing Studies
Epps, Richard D., M.A., Political Science
Fallows, Randall J., Ph.D., English
Farahani, Sam, Ph.D., Economics
Featherstone, C. Victoria, M.F.A., English
Federman, Nancy Jo, Ph.D., Sociology
Figueroa, Maria P., M.A., Chicana and Chicano Studies
Finn, Richard D., M.A., Rhetoric and Writing Studies
Fischer, Maria, M.B.A., Spanish
Fox, Debra A., M.A., Political Science; Sociology
Freeman, Roderick A., Ph.D., Philosophy
Freilicher, Melvyn S., C.Phil., English
Galbraith, Mary P., Ph.D., English
Garcia-Tannenhaus, Nuria, M.A., Spanish
Gauss, David R., M.A., Sociology
Ghosh, Huma A., Ph.D., Anthropology; History
Gillman, John L., Ph.D., Religious Studies
Gonda, Susan, M.A., Women's Studies
Gonzalez, Maria R., M.A., Spanish
Gordon, Robert L., M.A., Economics
Gorman, Kathleen, Ph.D., History
Graham, Mary B., M.F.A., English
Grajeda-Higley, Leilani, M.A., Chicana and Chicano Studies
Granger, John F., Ph.D., English
Greene, Myron, M.A., History
Grider, John T., M.A., American Indian Studies
Griffith, Ryan T., M.F.A., Rhetoric and Writing Studies
Grimshaw, Margaret L., Ph.D., History
Guthrie, Wayne L., Ph.D., History
Halavais, Mary H., Ph.D., History
Hay, Jeffrey T., Ph.D., History
Howe, Flora J., M.S., American Indian Studies
Huckabay, J. Dennis, M.A., Geography
Hyer, Joel, M.A., History
Ingram, III, James W., M.A., Political Science
Isaacson, Joan N., M.A., Geography
Jacob, Rodolfo, M.A., Chicana and Chicano Studies
Jacobs, Delores A., Ph.D., Women's Studies
Jaffe, Maggie S., M.A., English
Jessup, George V., M.A., Sociology
Johnston, Jr., Henry E., Ph.D., Sociology
Joyce, Barry A., Ph.D., History
Kappel, Lawrence, Ph.D., English
Keeney, Stephen A., M.A., Philosophy
Kehrenberg, Graziella Spinelli, D.L., French
Kelliher, Joseph P., M.A., Spanish
Kelly, Mary L., Ph.D., Religious Studies; Women's Studies
Kenway, Christopher, Ph.D., History
Kilcrease, Melody L., M.A., Rhetoric and Writing Studies
Kosonoy, Beatriz, M.A., Spanish
Kranenberg, Sigmund, Ph.D., Political Science
Kulkarni, Vijayalakshmi C., Ph.D., Economics
Laird-Jackson, Tex, M.A., Spanish
Lide, Thomas A., M.A., History

Part-Time Faculty

Locklear, Linda R., M.A., M.S., American Indian Studies
Lopez, Gonzalo A., M.A., Arts and Letters, General
Lopez, Maria Teresa, M.A., Spanish
López-Macias, Georgina, M.A., Spanish
Luvaas, William H., M.F.A., English
Lyne, Mona, Ph.D., Political Science
Mack, James B., Ph.D., Rhetoric and Writing Studies
Mackey, Linda C., J.D., Women's Studies
Madge, Leila, M.A., Anthropology
Maggio, Virginia M., M.A., Rhetoric and Writing Studies
Mahdavi-Izadi, Farid, M.A., History
Mahoney, R. Michael, Ph.D., History
Maier, Elizabeth, Ph.D., Arts and Letters, General
Maidershofer, Erik, M.A., History
Marcelli, Enrico A., Ph.D., Chicana and Chicano Studies
Martin, Stephen H., Ph.D., English
Martinez, Alexander D., M.A., Chicana and Chicano Studies
Martinez, Miguel M., M.A., Spanish
Martori, Carol Sue, M.A., Sociology
Mayhew, Kelly S., Ph.D., English
McDonald, Myrna D., M.A., Sociology
McKanna, Jr., Clare V., Ph.D., American Indian Studies; History
McNulty, Mark A., M.A., Economics
Mendoza, José L., M.A., Spanish
Michel, Suzanne M., M.A., Political Science
Miller, Joan T., M.A., Anthropology
Miller, Matthew H., B.A., History
Minarick, Judith, M.A., Spanish
Montero, Christa, M.A., Spanish
Mueller, Howard R., Ph.D., Philosophy; Religious Studies
Murillo, Luis E., M.A., History
Nericcio, Rosalinda F., M.A., Spanish
Nobiletti, Frank, M.A., History
Norton, Paget M., M.F.A., English
Novak, Tim B., M.A., Sociology
Nuñez, René, Ph.D., Chicana and Chicano Studies
Oh-Surh, Helen R., M.A., Sociology
Osborn, Alan R., Ph.D., Geography
Palmer, Mona G., M.A., Classics
Pedroza, José Carlos, M.A., Spanish
Penafuerte, Araceli S., M.A., Philosophy
Perez, Marcia, M.A., German
Phillips, Ashley E., M.A., Women's Studies
Potts, Stephen W., Ph.D., English
Putko, Carole A., Ph.D., History
Putman, John C., M.A., History
Quan, Nghiep C., M.A., Rhetoric and Writing Studies
Quinn, Ronald J., Ph.D., History
Ransom, Holly E., C.Phil., French
Reed, John S., Ph.D., History
Reed, William R., M.A., Rhetoric and Writing Studies
Renner, Lynette E., M.A., Rhetoric and Writing Studies
Reyes, Herminia V., M.A., Philosophy
Richardson, Diana G., M.A., Geography
Richey, Carolyn L., M.A., English
Ridgway, Jeanette F., Ph.D., English
Rockland, Steven G., M.A., M.S., Economics
Rodriguez, Barbara, Ph.D., Spanish
Rodriguez, Graciela, M.A., Spanish
Rowden, Tonita H., M.A., English
Roy, Carolyn S., C.Phil., History
Rus, Pilar, Ph.D., Spanish
Rutherford, Tracy, M.A., Women's Studies

Salazar, America, M.A., Spanish
Salgado, Elia, M.A., Spanish
San Juan, Joel H., M.A., Sociology
Sargent, Paul W., M.A., Sociology
Schelhorse, Larry D., Ph.D., Economics
Schlesinger, Steven A., M.A., Philosophy
Semm, Paul T., M.A., Sociology
Shahrokhi, Shahrokh, Ph.D., Economics
Shaver, Barbara M., Ph.D., Women's Studies
Shavit, Samy S., Ph.D., Religious Studies
Shenoy, Vasanthi, Ph.D., History
Sherman, Beth, M.A., Rhetoric and Writing Studies
Simpson, Kathryn M., M.A., Arts and Letters, General
Smith, Lawrence G., M.A., Economics
Soriano, Fernando I., Ph.D., Chicana and Chicano Studies
Spirito, Donald P., M.A., Economics
Stagnaro, Roberta J., M.A., English
Stevens, Robert H., Ph.D., American Indian Studies
Stoddard, Michael Mathis, Ph.D., Political Science
Sullivan, Julie A., M.A., Political Science
Swun, Yvonne A.Y., M.B.A., Arts and Letters, General
Sylvers, Josephine, M.A., French
Tafoya, Sonia M., M.A., Spanish
Thomas, Jesse J., Ph.D., Religious Studies
Thompson, Mary J., M.A., Rhetoric and Writing Studies
Thorngren, Jane R., Ph.D., Geography
Tierney, Barbara Poe, M.A., Economics
Tipton, Jr., Norman E., J.D., Sociology
Torrey, Susan M., Ph.D., Women's Studies
Trout, Polly, Ph.D., Religious Studies
Turley, Katherine M., Ph.D., History
Turner, Patricia, M.A., Rhetoric and Writing Studies
Tuttle, Jennifer S., Ph.D., English; Women's Studies
Valdés, Gina, M.A., Chicana and Chicano Studies
Valdivia, Maria S., M.A., Spanish
Velasco, Alfredo F., Ph.D., Chicana and Chicano Studies
Vereschatsky, Ludmila A., Ph.D., German
Vidal, Lilia C., M.A., Spanish
Walters, Wendy W., Ph.D., English
Wawrytko, Sandra A., Ph.D., History; Philosophy
Weeks, Gregory B., M.A., Political Science
Weeks, Jr., William E., Ph.D., History
Werner, Roland, Ph.D., Sociology
White, T. Melissa, Ph.D., History
Wildes, Fred T., Ph.D., Geography
Williams, Julie, M.A., Rhetoric and Writing Studies
Wilson, Erwin, M.A., Arts and Letters, General; French
Wilson, Irma G., M.A., Spanish
Wittenborn, Allen, Ph.D., English; History
Wong, Amy C., M.A., Sociology
Ysursa, John M., M.A., History
Zepeda, Eduardo M., Ph.D., Economics

BUSINESS ADMINISTRATION

Austin, Millard, B.S., Information and Decision Systems
Babcock, Darlene D., M.B.A., Finance
Becker, Timothy A., M.B.A., Marketing
Bergin, William, M.S., Information and Decision Systems
Dalbey, Richard O., Ph.D., Information and Decision Systems
Demarco, Rosalie, M.S., Information and Decision Systems
Drost, Ellen A., M.B.A., Management
English, Richard J., M.S., Marketing

Feltman, Richard I., Ph.D., Management
 Forgey, Michael R., M.B.A., Information and Decision Systems
 Garrett, Kenneth C., B.B.A., Accountancy
 Griffith, Peter W., M.B.A., Finance
 Harrington, Don L., J.D., Finance
 Horne, Kathryn A., M.B.A., Management
 Hunter, Hugh O., D.B.A., Finance
 Jaques, Kathryn M., B.A., Accountancy
 Judge, Robert A., M.B.A., Information and Decision Systems
 Kenney, William R., M.S., Information and Decision Systems
 Klinker, Henry J., LL.B., Finance
 Lehmann, David M., Ph.D., Management
 Lund, Max R., Ph.D., Information and Decision Systems
 Marks, Jeffrey S., M.S., Information and Decision Systems
 Martin, Joanne D., M.B.A., Management
 Maunu, Leanne M., M.A., Information and Decision Systems
 Merx, Georges, M.S., Information and Decision Systems
 Meyers, Veronica J., M.S., Management
 Mistarz, Rebecca, B.S., Information and Decision Systems
 Mutter, Herbert G., M.S., Accountancy
 Nelson, Thomas S., LL.M., Finance
 Olson, James E., M.B.A., Finance
 Plotkin, Robert D., M.B.A., Management
 Robbins, Blue, Ed.D., Management
 San Augustine, Andre J., Ph.D., Marketing
 Sannwald, William W., M.B.A., Management; Marketing
 Shahrokhi, Shahrokh, Ph.D., Finance
 Shaul, Kelly, J.D., Information and Decision Systems
 Stribling, Cynthia D., M.M., Finance
 Wendelmoot, Thomas L., Ph.D., Information and Decision Systems
 Yin, Kimberly, M.B.A., Marketing
 Zumberge, Catherine L., M.B.A., Management

EDUCATION

Adams, Denise, M.A., Teacher Education
 Alfaro, Christina, M.A., Policy Studies in Language and Cross-Cultural Education
 Alfaro, Jr., Antonio, M.S., Policy Studies in Language and Cross-Cultural Education
 Anderson, Barry C., M.A., Teacher Education
 Andrews-Beck, Carolyn, Ph.D., Teacher Education
 Annicharico, Joseph R., Ph.D., Special Education
 Aste, Mirian K., M.A., Policy Studies in Language and Cross-Cultural Education;
 Teacher Education
 Babby, Barbara M., B.A., Teacher Education
 Barry, Natalie Ault, M.A., Teacher Education
 Beasley, Edward J., Ph.D., Teacher Education
 Beck, Jr., George Donald, M.S., Educational Technology
 Bee, Mary, M.A., Teacher Education
 Benson, Christine A., M.S., Teacher Education
 Bjornson, Patricia J., M.A., Teacher Education
 Bloomberg, Leila A., M.A., Teacher Education
 Boucher, Barbara O., M.A., Teacher Education
 Bowen, Karen, M.A., Teacher Education
 Brass, Nancy E., M.A., Teacher Education
 Bronson, Michele D., M.S., Counseling and School Psychology
 Brown, Dennis, Ph.D., Teacher Education
 Burnside, Patricia M., M.A., Teacher Education
 Campbell, Lois A., Ph.D., Counseling and School Psychology
 Carson, Linda, M.A., Teacher Education
 Casey, Michael M., M.A., Educational Technology
 Chappell, Lois E., M.A., Special Education
 Conner, Nona, M.A., Teacher Education
 Coover, Kris W., M.A., Teacher Education

Corbin, Eugene W., Ph.D., Counseling and School Psychology
 Cornell, Marilyn, M.S., Counseling and School Psychology
 Cunningham, Rodger, M.S., Teacher Education
 Davies, Aida D., M.A., Policy Studies in Language and Cross-Cultural Education
 Erath, Ellen, M.A., Teacher Education
 Erdmann, Lareen J., Ph.D., Administration, Rehabilitation and Postsecondary Education
 Estrada, Cecilia, M.A., Policy Studies in Language and Cross-Cultural Education
 Flood, Sharon R., Ed.D., Teacher Education
 Fogelstrom, Nancy, M.A., Teacher Education
 Frazee, James Phillip, M.A., Educational Technology
 Fuhrman, Mimi, Ph.D., Teacher Education
 Fulop, Mark P., M.A., M.P.H., Educational Technology
 Galea'i, Kenneth E., Ph.D., Administration, Rehabilitation and Postsecondary Education
 Geiss, Rebecca, M.A., Teacher Education
 Glickman-Jones, Marjorie, M.A., Teacher Education
 Gomez, Christina, Ed.D., Policy Studies in Language and Cross-Cultural Education
 Gonzales, Miguel B., B.A., Policy Studies in Language and Cross-Cultural Education
 Goycochea, Bonnell, M.A., Counseling and School Psychology
 Gunner, Maggie, M.A., Teacher Education
 Gunst, Rosemary, B.S., Teacher Education
 Gwinnup, Judith A., M.A., Special Education
 Hagen, Monica H., M.A., Teacher Education
 Herman, Ernestine M., M.A., Policy Studies in Language and Cross-Cultural Education
 Hicks, Tom, Ph.D., Counseling and School Psychology
 Hopper, Mary R., M.A., Administration, Rehabilitation and Postsecondary Education
 Howe, Flora J., M.S., Counseling and School Psychology
 James, Helen F., Ed.D., Teacher Education
 Jarosz, Eva J., M.Ed., Counseling and School Psychology
 Jimenez, Lillian I., M.A., Policy Studies in Language and Cross-Cultural Education
 Jones, Edward C., M.S., Administration, Rehabilitation and Postsecondary Education
 Joyce, Barry A., Ph.D., Teacher Education
 Kasendorf, Stacey J., M.A., Special Education
 Kellett, Susan, M.A., Special Education
 Kelso, Brady P., M.A., Teacher Education
 Kimmy, Kathleen, M.A., Teacher Education
 Kopenski, Donna, Ph.D., Teacher Education
 Kramer, Ruth H., M.A., Special Education
 Lancaster, Nancy R., M.Ed., Teacher Education
 Lange, Mary K., M.A., Educational Technology
 Linman, Teresa Randel, B.A., Educational Technology
 Littrell, Janet L., Ed.D., Administration, Rehabilitation and Postsecondary Education
 Littrell, Jarleen H., M.S., Teacher Education
 Llera, Manuel, M.A., Policy Studies in Language and Cross-Cultural Education; Teacher
 Education
 Llerandi, Julian, M.A., Policy Studies in Language and Cross-Cultural Education
 Logsdon, John W., M.A., Teacher Education
 Ludi, Patricia A., M.A., Policy Studies in Language and Cross-Cultural Education
 Lujan, Nancy, M.A., Teacher Education
 Luke, Equilla, Ph.D., Counseling and School Psychology
 Lungren, Linda E., D.M.E., Teacher Education
 Manderson, Carole J., M.A., Teacher Education
 Marr, Candace, Ed.D., Teacher Education
 Martin, Melinda M., M.A., Administration, Rehabilitation and Postsecondary Education
 Marushige, Ken, M.A., Educational Technology
 McBrayer, Sandra, M.A., Teacher Education
 McClure, Melinda K., M.A., Special Education
 McElmell, Roger T., M.A., Educational Technology
 McLean, Deborah, M.A., Special Education
 Mendoza, Clifford, M.A., Teacher Education
 Messina, Constance, M.S., Counseling and School Psychology
 Morales Hoffman, Lydia E., M.A., Policy Studies in Language and Cross-Cultural Education
 Morrison, Sharon L., Ph.D., Counseling and School Psychology

Part-Time Faculty

Moss, Scott H., M.A., Educational Technology
Munoz, George, M.A., Educational Technology
Myerson, Gary W., M.A., Special Education; Teacher Education
Nadeau, Adel T., Ph.D., Policy Studies in Language and Cross-Cultural Education
Navarro, Dawn D., M.A., Policy Studies in Language and Cross-Cultural Education
Nicodemus, Charlotte A., M.S., Administration, Rehabilitation and Postsecondary Education
Nuñez, René, Ph.D., Policy Studies in Language and Cross-Cultural Education
Odenhal, JoAnne, Ph.D., Educational Technology
Ollerman, Dennis L., M.A., Counseling and School Psychology
Pantelis, Kay, M.A., Teacher Education
Perkowski, Sharon M., M.S., Counseling and School Psychology
Pope, Cristy A., M.A., Policy Studies in Language and Cross-Cultural Education
Quon, Robert, M.A., Administration, Rehabilitation and Postsecondary Education
Ramirez, Celia A., M.A., Policy Studies in Language and Cross-Cultural Education
Ramírez, Jorge A., M.A., Policy Studies in Language and Cross-Cultural Education
Raphael, Philip J., Ph.D., Counseling and School Psychology
Richman, Carol L., M.A., Teacher Education
Rider, Diane K., M.A., Policy Studies in Language and Cross-Cultural Education
Rivera, John, Ph.D., Teacher Education
Robershaw, Phyllis L., M.A., Teacher Education
Rodifer-Zaino, Karen, M.A., Special Education
Rodríguez, John C., B.S., Policy Studies in Language and Cross-Cultural Education
Sage, Maureen E., Ed.D., Teacher Education
Salas, Minerva, M.A., Policy Studies in Language and Cross-Cultural Education
Sandoval, Sam, B.S., Teacher Education
Sanz, Ernesto, M.A., Policy Studies in Language and Cross-Cultural Education; Teacher Education
Sax, Caren L., M.A., Administration, Rehabilitation and Postsecondary Education; Teacher Education
Schell, Emily, M.A., Teacher Education
Scott, Terry, Ed.D., Administration, Rehabilitation and Postsecondary Education
Shanklin, Aldona, M.S., Special Education
Shappee, Rudolph, M.A., Teacher Education
Sherr, Leonard, Ph.D., Administration, Rehabilitation and Postsecondary Education
Siegfried, Thomas L., M.S., Administration, Rehabilitation and Postsecondary Education
Smith, Craig R., Ph.D., Counseling and School Psychology
Stein, Robert, Ph.D., Special Education
Stokes, Edward, M.A., Teacher Education
Torres-Stanovik, Maida, Ed.D., Policy Studies in Language and Cross-Cultural Education
Tregger, Rochelle D., Ph.D., Teacher Education
Tremaine, Claire D., Ph.D., Teacher Education
Van Dyke, Janice, Ph.D., Teacher Education
Weinstein, Edward D., Ph.D., Counseling and School Psychology
Whitehead, L. Dinorah, M.A., Policy Studies in Language and Cross-Cultural Education
Whitehurst-Payne, Sharon, Ph.D., Teacher Education
Wilder, Rebecca A., M.A., Policy Studies in Language and Cross-Cultural Education
Williams, Francine F., Ph.D., Policy Studies in Language and Cross-Cultural Education
Zlotnick, Susan, M.A., Teacher Education

ENGINEERING

Andrews, M. Scott, M.S.E.E., Electrical and Computer Engineering
Bakhru, Keshoolal, Ph.D., Electrical and Computer Engineering
Berger, Vera, Ph.D., Civil and Environmental Engineering
Beyene, Asfaw, Ph.D., Mechanical Engineering
Butler, Geoffrey S., M.S., Aerospace Engineering and Engineering Mechanics
De La Houssaye, Paul R., Ph.D., Electrical and Computer Engineering
Dhingra, Kailash C., Ph.D., Electrical and Computer Engineering
George, Robert R., M.S., Civil and Environmental Engineering
Impelluso, Thomas J., Ph.D., Mechanical Engineering
Khwaja, Ziauddin, Ph.D., Electrical and Computer Engineering
McElmury, Scott S., Ph.D., Civil and Environmental Engineering
Phillips, David B., M.S.E.E., Electrical and Computer Engineering

Sarkar, Sheila, Ph.D., Civil and Environmental Engineering
Schreffler, Eric N., M.S., Civil and Environmental Engineering
Shaki, Mohammed K., M.S., Civil and Environmental Engineering
Shoemaker, Patrick A., Ph.D., Electrical and Computer Engineering
Terry, Ann H., M.S., Civil and Environmental Engineering
Tricoles, Gus P., Ph.D., Electrical and Computer Engineering
Young, Paul H., Ph.D., Electrical and Computer Engineering

HEALTH AND HUMAN SERVICES

Adler, Jacqueline B., M.A., Communicative Disorders
André, Janice J., M.A., Communicative Disorders
Anguera, Joaquin, Ph.D., Health and Human Services, General
Becker, Irene P., M.S.W., Social Work
Bidwell, Janice D., M.N., Nursing
Blackington, Blanche L., M.A., Communicative Disorders
Boothroyd, Arthur, Ph.D., Communicative Disorders
Bradley, Beverly J., Ph.D., Nursing
Branch, Carol A., M.A., Communicative Disorders
Bray, Robert L., Ph.D., Social Work
Buteau, Carol L., M.A., Communicative Disorders
Catterall, Kathleen A., M.A., Communicative Disorders
Chase, Renata S., M.S.W., Social Work
Clark, Gail E., Ph.D., Nursing
Coffin-Romig, Nancy A., M.S.N., Nursing
Colwell, Carolyn B., M.A., Nursing
Conway, Terry L., Ph.D., Public Health
Cummings, Susan H., M.N., Nursing
Daly, Donna M., M.S.W., Social Work
DuBois, Barbara C., Ph.D., Health and Human Services, General
Dudley, Donald E., M.S.W., Social Work
Dunaway, Claudia, M.A., Communicative Disorders
Fagan, Mary K., M.A., Communicative Disorders
Fischer, Marlowe K., M.A., Communicative Disorders
Fong, Terri A., M.S.W., Social Work
Garcia, Piedad, Ed.D., Social Work
Gold, Edith D., M.A., Nursing
Golden, Lauren J., M.S.W., Social Work
Gonaver, Charles, M.P.H., Public Health
Goodman-Gruen, Deborah L., M.D., Public Health
Gresham, Louise S., Ph.D., Public Health
Harris, Stephen B., Ph.D., Public Health
Hill, Linda L., M.D., Public Health
Hinzman, Laurie R., M.A., Communicative Disorders
Ingrum, David A., M.D., Public Health
Inot-Simpson, Susan, M.S.N., Nursing
Kane, Mary J., M.A., Communicative Disorders
Katzman, Jodi S., M.S.N., Nursing
Kohout, Mark E., M.A., Communicative Disorders
Kraus, David V., J.D., Public Health
Kreisworth, Virginia S., Ph.D., Public Health
Lamke, Celia A., M.S., Nursing
Launer, Patricia B., Ph.D., Communicative Disorders
Leary, Sheryl E., M.S.N., Nursing
Ledbetter, Elizabeth K., M.D., Public Health
Ledwith, James W., M.B.A., Public Health
Macchione, Nick, M.P.H., Public Health
Mallinger, Kathleen M., Ph.D., Public Health
Manos, Steve P., M.S.W., Social Work
Marsden, Martha A., Ph.D., Health and Human Services, General; Social Work
McLeod, Renee P., M.S.N., Nursing
Miller, David L., Ph.D., Communicative Disorders
Miller, Mary Ellin, M.S.N., Nursing

Milstein, Marjorie F., M.S.W., Social Work
 Mulvihill, Mary M., Ph.D., Public Health
 Murnahan, Nancy S., M.S.N., Nursing
 Nedoba, Cindy A., M.S.N., Nursing
 Ngo-Nguyen, Phuong-Lien, M.S.N., Nursing
 Norton, Laura M., M.S.N., Nursing
 Ortiz, Georgia L., M.A., Communicative Disorders
 Osuyos, Roberta A., M.S.W., Social Work
 Perez, Isabelle T., M.S.W., Social Work
 Pierce, Edward C., M.S.W., Social Work
 Ross, Robert K., M.D., M.G.A., Public Health
 Rowe, Linda J., Ph.D., Communicative Disorders
 Schreiber, Judith L., M.S.W., Social Work
 Schumacher, Janis L., M.A., Communicative Disorders
 Segars, Lance B., Ph.D., Social Work
 Shaffer, Richard A., Ph.D., Public Health
 Shuman, Tarek M., Ph.D., Health and Human Services, General
 Sproul, Annette, M.S.W., Social Work
 Stringer, Jerrie, M.A., Communicative Disorders
 Stuckhardt, Kay, M.P.H., Public Health
 Takvorian, Diane L., M.S.W., Social Work
 Taver, Johnie Mae, M.S.N., Nursing
 Taylor, Susan L., M.S.N., Nursing
 Weber, Charles E., Pharm.D., Nursing
 Wester, Derin C., Ph.D., Communicative Disorders
 Wolff, Sharron T., M.A., Communicative Disorders
 Yancey, Sherry, B.S.N., Nursing
 Young, Jane E., M.P.H., Public Health

PROFESSIONAL STUDIES AND FINE ARTS

Albert, Cliff E., B.S., Communication
 Anderson, Shirley F., M.P.A., Public Administration
 Apostolos, Jr., Robert J., M.S., Public Administration
 Armstead, Rulette V., M.S., Public Administration
 Asebedo, Anna Maria, M.F.A., Art
 Atwater, Judy L., B.A., Art
 Baber, Walter F., Ph.D., Public Administration
 Barba, Douglas A., Ph.D., Exercise and Nutritional Sciences
 Barkett, Ronald S., M.A., Public Administration
 Beck, Andrea P., M.S., Recreation, Parks and Tourism
 Behana, Elinor E., M.S., Child and Family Development
 Bishop, Bryce E., M.A., Communication
 Boaz, Norman G., M.A., Music
 Bornemisza, Magdolna F., M.A., Music
 Bowman, Blaine K., J.D., Public Administration
 Brock, Gerald D., Ph.D., Public Administration
 Caesar, Robert T., M.A., Recreation, Parks and Tourism
 Carlson, Craig J., M.A., Art
 Cleary, John J., J.D., Public Administration
 Craig, Richard G., M.S., Recreation, Parks and Tourism
 Cruz, Evelyn, M.F.A., Theatre
 Culbreth-Graft, Penelope, D.P.A., Public Administration
 Curtis, Christine E., B.A., Public Administration
 Darroch, James E., M.Arch., Art
 Deltoro, Gilbert, M.A., Communication
 Duehring, Laura J., Ed.D., Exercise and Nutritional Sciences
 Dunn, Jeanne, M.A., Art
 Elliott, Lynn Hope, M.S., Recreation, Parks and Tourism
 Erb, Jr., John A., B.A., Music
 Evans-O'Connor, Kellie E., M.A., Music
 Fare, Gerald L., M.S., Public Administration
 Feldman, David A., M.S., Communication

Flood, John C., M.A., Music
 Fobes, David A., M.F.A., Art
 Fournet, Annette E., M.F.A., Art
 Francis, Lloyd G., B.A., Exercise and Nutritional Sciences
 Francis, Lorna L., Ph.D., Exercise and Nutritional Sciences
 Funicello, Ralph, B.F.A., Theatre
 Fyock, Louise E., M.P.A., Public Administration
 Gabay, Janis S., M.A., Recreation, Parks and Tourism
 Gillette, Glenn A., B.F.A., Music
 Goodell, Shawn R., M.F.A., Art
 Grebl, James W., Ph.D., Art
 Greene, V. Ruth, Ed.D., Exercise and Nutritional Sciences
 Halverson, Paula Dee, Ph.D., Exercise and Nutritional Sciences
 Hamada, Gary T., B.A., Art
 Hersko, Judit, M.F.A., Art
 Hildebrand, John M., M.A., Communication
 Jew, Robert, B.F.A., Art
 Kahn, Gregory M., A.B., Communication
 Katz, Martin B., M.A., Theatre
 Keely, Richard C., M.F.A., Art
 Keith, Carolyn J., M.F.A., Theatre
 Kelly, Edward, M.A., Communication
 Kennedy, Tracey L., M.A., Recreation, Parks and Tourism
 Kilmer, Brian J., M.A., Music
 Klingele, Stacy L., B.A., Exercise and Nutritional Sciences
 Knapp, Evan J., Music
 Koverman, Paul T., Dance
 Kwon, Yang Jun, M.F.A., Art
 Lamson, Mark D., Music
 Lara, Mario F., B.A., Art
 Larlham, Margaret C., M.A., Theatre
 Litrownik, Hollis M., M.A., Art
 Luera, Maryann, M.F.A., Art
 Lussa, Sue A., M.S., Communication
 Lustig, James B., M.S., Recreation, Parks and Tourism
 MacDougall, Sheila D., M.A., Theatre
 MacKenzie, Mary R., M.S., Music
 McGrath, Melissa M., M.F.A., Art
 McKenzie, Randi E., M.Ed., Exercise and Nutritional Sciences
 McLaughlin, Michael T., M.C.R.P., Public Administration
 Morgan, Amy P., M.F.A., Art
 Mosier, Kelly L., M.S., Exercise and Nutritional Sciences
 Myers, Donald N., Ph.D., Child and Family Development
 Oleff, Howard, B.S., Communication
 Palese, Kate H., M.A., Art
 Park, Dianne W., M.A., Music
 Parker, Elizabeth A., M.S., Recreation, Parks and Tourism
 Parker, Richard A., Ph.D., Public Administration
 Payne, H. September, D.M.A., Music
 Pedersen, D. Kent, J.D., Public Administration
 Ransom, Bryan K., B.A., Music
 Rubin, Michelle A., M.S., Exercise and Nutritional Sciences
 Rupp, Joan W., M.S., Exercise and Nutritional Sciences
 Sauvajot, John B., M.S., Public Administration
 Schneider, Joseph F., M.A., Communication
 Schultz, Janice D., M.S., Exercise and Nutritional Sciences
 Sexton, Barbara A., M.A., Art
 Smith, Gregory J., M.P.A., Public Administration
 Soria, Merja T., Music
 Sowell, Teri L., M.A., Art
 Strelow, Jamie, M.S., Recreation, Parks and Tourism
 Swann, Cynthia L., M.S., Exercise and Nutritional Sciences
 Truth, Patricia M., M.L.A., Recreation, Parks and Tourism

Part-Time Faculty

Ucar, Tefvik F., M.A., Art
Ulrich, Kenneth G., M.A., Professional Studies and Fine Arts, General; Communication
Van Camp, Steven P., M.D., Exercise and Nutritional Sciences
Walujo, Djoko, M.A., Music
Wheat, Michael G., J.D., Public Administration
Wilkins, Charles J., M.A., Public Administration
Williams, Allyson J., M.A., Art
Wolf, Barbara L., Ph.D., Theatre
Woods, Ann C., Ph.D., Art
Wright, Robert A., B.S., Art
Wulfemeyer, Lori L., J.D., Communication
York, Keith A., M.S., Communication
Young Shawn, M.S., Music

SCIENCES

Baker, Elizabeth D., M.S., Geological Sciences
Bartlett, Janeth M., Ph.D., Biology
Bauder, Ellen T., Ph.D., Biology
Benoit, Margaret, Ph.D., Chemistry
Boyd, Barbara A., M.A., Mathematical and Computer Sciences
Callahan, Wendell J., Ph.D., Psychology
Camp, Victor E., Ph.D., Geological Sciences
Cavanaugh, Kevin, M.A., Mathematical and Computer Sciences
Cerbone, Ralph J., Ph.D., Physics
Cheroske, Alex, B.A., Biology
Conway, Terry L., Ph.D., Psychology
Crivello, Michael, M.S., Physics
Dean, Robert J., M.A., Physics
Dhingra, Kailash C., Ph.D., Physics
Doyle, Thomas J., Ph.D., Psychology
Feldman, Jeannine A., Ph.D., Psychology
Figueroa, Silvia, M.A.T., Mathematical and Computer Sciences
Fox, Gordon A., Ph.D., Biology
Frost, Richard, M.S., Mathematical and Computer Sciences
Garver, Sandra, M.S., Biology
Gill, Perri L., M.A., Mathematical and Computer Sciences
Glaser, Dale N., Ph.D., Psychology
Goldin, Eric M., Ph.D., Biology; Physics
Hanscom, Patricia R., M.S., Biology
Hastings, Steven J., M.A., Biology
Hokoda, Audrey J., Ph.D., Psychology
Hwang, Jengyuan, Ph.D., Mathematical and Computer Sciences
Kobus, David A., Ph.D., Psychology
Kollars, Peggy D., B.S., Biology
Konoske, Paula J., Ph.D., Psychology
Kovacic, Peter, Ph.D., Chemistry
Krown, Kevin A., Ph.D., Biology
Landau, Samuel B., Ph.D., Psychology
Leonard, Guy E., B.S., Mathematical and Computer Sciences
Lucci, Robert D., Ph.D., Biology
Lynch, Mary Ann, Ph.D., Geological Sciences
Martin, Estralita M.E., Ph.D., Biology
Matey, Victoriya, Ph.D., Biology
Mattson, Sarah N., Ph.D., Psychology
McDevitt, Margaret A., Ph.D., Psychology
McDonald, Barbara A., Ph.D., Psychology
McNamara Schroeder, Kathleen, M.S., Chemistry
Menegus, Raymond J., M.S., Mathematical and Computer Sciences
Miyake, Jon, Ph.D., Biology
Newsome, Joe, B.A., Biology
Noble, Helen A., M.S., Mathematical and Computer Sciences
Peterson, Karen I., Ph.D., Chemistry

Rieker, Joseph W., M.A.T., Mathematical and Computer Sciences
Robinson, Kevin L., M.S., Geological Sciences
Sabbadini, Gail A., M.A., Biology
Schar, Thomas P., M.S., Geological Sciences
Shubeita, Huda, Ph.D., Biology
Sieber, William J., Ph.D., Psychology
Sledge, Paul, Ph.D., Psychology
Snover, Richard L., M.S., Mathematical and Computer Sciences
Sparta, Steven N., Ph.D., Psychology
Spydell, R. Andrew, M.S., Mathematical and Computer Sciences
Stolarz-Fantino, Stephanie J., Ph.D., Psychology
Tackett, Patricia A., Ph.D., Psychology
Tatum, B. Charles, Ph.D., Psychology
Truesdale, H. David, Ph.D., Biology
Wing, Luman, Ph.D., Biology

ATHLETICS

Afoa, Ulima F., B.A.
Baldwin, Damon, B.A.
Bermundo, Eileen P., B.S.
Bleil, Fred, M.S.
Clegg, Charles P., B.A.
Crawford, Carin D., M.A.
Delgado, Kenneth, B.S.
Dickens, Wayne A., B.A.
Dietz, James C., M.S.
Falar, Diane, B.A.
Filter, Russell D.
Gilbert, Claude, M.S.
Gulati, Susheel, B.A.
Haines, Mark E., M.A.
Henn, John T., B.S.
Johnson, Gary B., M.S.
Kirshner, Lev Y., B.A.
Lay, David R., M.A.
Mattera, Peter A., M.A.
McDaniel, Kyla L., M.A., M.S.
Miner, Amy J., B.S.

Nanista, Jennifer A., M.S.
Nelson, John, M.A.
Ohton, David P., B.S.
Parker, Stacy S., M.Ed.
Peters, Carolyn R., M.A.
Pola, Kennedy, M.A.
Price, Jennifer, M.S.
Ross, John J., B.A.
Schmidt, Deena D.
Schramm, David A., A.B.
Sheffield, Rhan D., B.A.
Smith, Barbara, M.A.
Steckel, Scott F.
Stoner, Neale R., M.A.
Tollner, A. Theodore, M.A.
Van Wyk, Katherine N., M.A.
Verbanic, II, Joe R., M.A.
Waldick, Kevin A., B.S.
Warner, Mark A., B.A.
Weinberg, Sara A., M.S.
Wright, Sandra, B.S.
Zigante, Gretchen M.

IMPERIAL VALLEY CAM- PUS

Anderholt, L. Brooks, J.D.
Blumberg, Louis M., Ph.D.
Briggs, John H., M.S.
Burns, Robertta J., M.P.A.
Carrillo, Marco A., Ph.D.
Carter, Harold D., M.P.A.
Cook, Patricia Ann, M.A.
Cruz, Juan J., M.A.
David, Samuel, Ph.D.
Dipp, Nishmet, M.S.
Garcia, Silvia H., M.S.W.
Henderson, Thomas W., M.A.
Jacklich, Joel, M.F.A.
Jensen, Wendy D., M.S.W.
Klentschy, Michael P., Ed.D.

Kofford, Bret M., M.A.
Lyon, Diane Marie, M.A.
McFaddin, Audrey F., M.A.
Montes, Ana M., M.A.
Murton, Harriot H., M.Ed.
Otero, Gilbert G., J.D.
Palese, Kate H., M.A.
Quinn, Sarah E., M.A.
Rickard, James J., Ph.D.
Ross, Karen, M.S.W.
Rousseau, William R., M.A.
Shaver, Barbara M., Ph.D.
Sherlock, Warren T., M.A.
Shinn, Mary O., M.Ed.
Western, Mickey J., M.Ed.
Williams, Kjersti, M.A.

Adjunct Faculty

ARTS AND LETTERS

Atterton, Peter C., Ph.D., Philosophy
Aviles, Luis Alberto, Ph.D., Arts and Letters, General
Baksh, Michael G., Ph.D., Anthropology
Cabrera, Anita, Ph.D., Arts and Letters, General
Cayleff, Susan E., Ph.D., American Indian Studies
Cohen, Albert K., Ph.D., Sociology
Colston, Stephen A., Ph.D., American Indian Studies
Cooper, Gwendale, Ph.D., American Indian Studies
Cottrell, Barbara J., M.A., Sociology
Cox, Thomas R., Ph.D., American Indian Studies
Cruz Pineiro, Rodolfo, Ph.D., Sociology
Dapper, Roxana M., M.A., English
Davies, Nigel, Ph.D., Arts and Letters, General
Debchaudhury, Sudata, Ph.D., History
Diamant, Kathi, B.A., Arts and Letters, General
Easland-Whitney, Phyllis A., Ph.D., Anthropology
Echeverria, Max Sergio, Ph.D., Arts and Letters, General
Feldman, Arthur W., Ph.D., Arts and Letters, General
Feldman, David, Ph.D., Arts and Letters, General
Fielden, Carl, M.A., Rhetoric and Writing Studies
Gadalla, Mahmoud Saad, Ph.D., Sociology
Ghougassian, J. A., Ph.D., J.D., Political Science
Gobble, Sheryl J., M.A., Rhetoric and Writing Studies
Grier, William H., M.D., Africana Studies
Gross, G. Timothy, Ph.D., Anthropology
Howatt, Jr., William J., J.D., Political Science
Johnson, Willard L., Ph.D., American Indian Studies
Kanekar, Suresh, Ph.D., Arts and Letters, General
Keeseey, Miriam, M.A., Rhetoric and Writing Studies
Keitel, Bruce A., M.A., English
Klicperova, Martina, Ph.D., Political Science
Koshikawa, Yoskiaki, M.A., English
Lin, Thomas Yun, B.A., Arts and Letters, General
Lindburg, Donald G., Ph.D., Anthropology
MacRenato, Terno, M.A., History
Maier, Elizabeth, Ph.D., Arts and Letters, General
Marin, Sergio, Ph.D., English
Matthews, Fred, Ph.D., History
Moser, Robert J., Ph.D., Sociology
Mudgett, Carol A., Ph.D., Anthropology
Newman, Otto, Ph.D., Sociology
Novak, Gary Lee, M.A., Sociology
Paynter, Edward L., Ph.D., History
Rea, Amadeo M., Ph.D., Anthropology
Richeport-Haley, Madeleine, Ph.D., Anthropology
Ritter, Eric W., Ph.D., Anthropology
Rodriguez, Joe D., Ph.D., American Indian Studies
Rosenberg, Emily S., Ph.D., History
Rosenberg, Norman L., Ph.D., History
Rutledge, Vera L., Ph.D., History
Salazar-Duchicela, Kimlisa, Ph.D., Arts and Letters, General
Schwartz, Rosalie, Ph.D., History
Sharon, Douglas G., Ph.D., Anthropology

Sheres, David, Ph.D., Arts and Letters, General
Shipek, Florence C., Ph.D., American Indian Studies
Shor, Francis R., Ph.D., History
Taschek, Jennifer T., Ph.D., Anthropology
Tharaud, Barry C., Ph.D., English
Tyson, Rose A., M.A., Anthropology
Tyzzer, III, Robert N., Ph.D., Anthropology
Vega, Enrique, Ph.D., Arts and Letters, General
Veliz De Vos, Maria, Ph.D., Arts and Letters, General
Watson, Maria-Barbara, Ph.D., American Indian Studies
White, Christopher W., M.A., Anthropology
White, Michael C., M.A., Anthropology
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